Section Ten



Author's Edition


DONATED BY
THE LARRY ZIM
WORLD'S • FAIR • COLLECTION

FT
500
C1
B212
1893b
V.10
Cornell

architraves, and beneath each window, moulded modillions. In the interior is a central nave 30 feet wide, from which rises a polygonal dome, giving accentuation to the architectural scheme.

In the India building the ancient glories of Agra, with its changing fortunes, are fully typified, and here are models in marble and alabaster of many monuments which testify to the former power of Moslem and Hindoo. Even the famous mausoleum is shown in miniature, the original bearing a dome of marble 70 feet in diameter. The structure itself is an harmonious combination of Arabic and Indian architecture, minarets springing from above the main entrance and corners, the former painted in oriental style. While the exhibits are unique and comprehensive, perhaps the most interesting feature is a party of Hindoos of high caste who have come to America partly on a proselyting and partly on a business mission.

Great Britain is of course represented in the industrial and historic collections of the India building, and especially the India tea association and the Bengal chamber of commerce. Near the principal entrance is a tea room, where the beverage as made in India is served by native attendants in picturesque attire, and presented in porcelain hand-painted by native artists. Small tables are placed in shady corners of the hall, where the visitor may enjoy the variegated picture presented by the art manufactures of the empire, scattered profusely around him and in the galleries above. In the centre of the main floor is a marble shrine, elaborately carved and colored, standing about the height of a tall man. On thousands of such shrines in India are images of the Hindoo trinity—Brahma, the creator; Vishnu, the preserver; and Siva, the destroyer; but here are no sacred effigies, except that on either side is a figure of Buddha, screened by the hood of the sacred cobra from the scorching rays of the sun, while the eastern savior of mankind is absorbed in worship or contemplation. Carved in stone or wood, hammered from brass, painted and embroidered on silk or satin, are also such minor divinities as Agni, the god of fire, who burns the body that he may recreate it in celestial form; Doorga, wife of Siva, with three eyes and ten arms; Sudra, the king of heaven, and Tama, the judge of the dead; Krishna, one of Vishnu's many incarnations, and the elephantine Ganesha, symbol of prudence.



EXHIBITION HALL, SWEDEN

A superb display of art manufactures is made by Tellĕry and company, whose headquarters are at Delhi, with branches in Calcutta, Bombay, and Simla. Every article is fashioned by hand, and the entire exhibit is intended to illustrate the efforts of business men to check the importation of goods which threatens to overwhelm the native industries of the country. Since rich and poor alike utilize their savings in the making of silver articles, either for personal adornment or practical use, the trade in silverware has assumed a leading position, centring at Kashmir, Lucknow, Kutch, Madras, Poona, Kuttack, and Burmah. While these articles are all in repoussé work, handsomely wrought, they have also their characteristics, according to the locality in which they are made. The influence of Mohammedanism is shown in the Kashmir wares, whose ornamentations are exclusively floral in character, the designs being chiefly taken from shawl patterns. Raised mythological figures, relieved by floral decorations, give to the articles collected from Madras and Poona their pleasing effect. But the Burmese repoussé work on silver is considered the most artistic, the exhibits from all these points comprising tea and coffee sets, wine jugs, sugar bowls, candlesticks, bread baskets, photograph frames, cream and milk jugs, salt cellars, pepper casters, card and cigarette cases, toilet sets, and boxes of many descriptions. There is also an attractive display of articles wrought in brass and copper, chiselled, embossed, engraved, enamelled, and incrusted in a variety of designs and with a richness of



ARTUR LEFFLER

effect which is the best possible proof of the skill and patience of artisan and designer.

Piled upon counters and tables on the ground floor and in the galleries are rich silks, many of them woven from Chinese material; brocades worn by Hindoo ladies; Kashmir shawls and silk embroideries; silver tinsels from the hand looms of Delhi and Agra; gold leaf cotton prints, studded with glass, from Poona; cloths covered with designs in wax and sprinkled with mica; woollen and cotton carpets and rugs, with goods of silk and cotton printed and embroidered.



NORWAY'S BUILDING

Carvings in black, sandal, and teak woods are exhibited as specimens of an industry which has flourished in India for many centuries. In ancient times carvers in wood ornamented the thrones of kings and princes, the chariots of warriors, and the shrines of temples. These were the days when the façades, doors, windows, balconies, partition screens, and furniture in the dwellings of the rich were elaborately decorated, the custom gradually spreading to the west. The most intricate work in sandal wood comes from the Madras and Bombay presidencies, Mysore and Burmah, the Burmese carvings being especially bold and fantastic. The Punjab and the northwest provinces supply the best inlaid specimens, their most noticeable characteristic being the combination of brass wire with dark colored woods. Beautiful lacquer work, ivory carvings, water color paintings on ivory, most of them miniatures of the Mogul emperors, enamels on gold and silver, idols and sacred animals in marble, such as are seen in the temples, and the delicate pottery which the high caste Hindoo will never use but once, are presented in many forms and symphonies of coloring.

Finally there are relics and curios, some of historic character. One of the most remarkable is a collection of swords, battle-axes, matchlocks, powder-horns, spears, bows, arrows, and shields, representing the weapons of the Hindoos and Mohammedans, the Burmese and the warlike Mahrattas. There are the finest of Damascus blades, the steel of which is said to have come from India, the entire group being suggestive of the wars and conquests of ancient and modern times. Old manuscripts and pictures, antique musical instruments, bronze vessels and idols from Thibet and Nepaul, Indian, Indo-Scythian and Græco-Bactrian coins, and a quantity of chinaware sent long ago by the emperors of the celestial kingdom as tribute to the Mogul emperors, are among the curiosities here displayed.



CHR. RAVN, NORWEGIAN COMMISSIONER

There are also living curiosities in the East India building, among them one Gobind Burshad, a Brahmin high-priest, and the first one, as he claims, to visit the United States. Gobind is a man of striking appearance, with jet black hair slightly tinged with grey and features thoughtful and intent. He is a scholarly man withal, speaking English, Mogul, and Persian fluently, in addition to Hindostanee. What pleases him best is to discuss theosophy and to show his knowledge of the ancient traditions of his native land, especially as to its gods, of which there are many in this temple—gods of brass and bronze, of ivory and wood, of silver, gold, and precious stones. Of all the antique specimens he knows the history, and taking up, for instance, an ivory statuette will declare that it came from a Buddhist temple where, 1,000 years ago, it was worshipped as the god of war.

Of the courts which represent the British colony of Ceylon, two are in the departments of Agriculture and Manufactures, one in the Woman's building, and the fourth remains to be described. Except of course in the Manufactures division, all are mainly intended to place before the public the tea industries of the country as developed within recent years, exports of tea increasing from 23 pounds in 1873 to 162,000 pounds in 1880, and 72,000,000 in 1892. Since the coffee plantations were almost destroyed by the ravages of a fungoid pest, the cultivation of tea has become the staple industry of Ceylon, and

for its products are claimed special dietetic properties, with superior richness of flavor and absolute purity and cleanliness. By the Planters' association of the chamber of commerce funds were promptly subscribed, and a local committee, acting in accord with the royal commission in London, undertook the task of organizing the exhibits, J. J. Grinlinton, as special commissioner, proceeding to Chicago to secure the necessary space.

The Ceylon court, which serves at once as government building, exhibition hall, and tea kiosk, consists of a central octagon, with wings facing north and south, raised on a projecting basement and approached by stairways carved in designs from ruined fanes, some of them erected several centuries before the Christian era. In its columnar design the structure is mainly of the Dravidian order of architecture, adopted with modifications in the ancient temples of the Cingalese. Native woods only are used as materials, some 20,000 feet of timber being cut and shaped for the purpose. The framework of the exterior is of satinwood and the projecting roofs terminate at the eaves line in ornamental valance tiling, the roofs themselves being covered with imitation pantiles, rising at the centre in tiers and culminating in a spire, with finial as in the temple of the Sacred Tooth of Buddha.



THE TURKISH BUILDING

In the octagonal hall, entered through a handsomely carved doorway, the ceiling is supported by pillars on which are designs of the lotus and plantain, fashioned as in the royal temple and the king's granary at Kandy. A score of native woods are used in these pillars; among them ebony, tamarind, satin, and ironwood, their names, whether botanical or in plain English or Cingalee, being indicated on labels. On opposite sides of the hall are colossal figures of Buddha and Vishnu, with others, disposed at intervals, of a Buddhist priest and his bowl for receiving alms, of a Kandyan chief, and a Veddah and his wife, very few of the aboriginal Veddahs now remaining alive. The panels are painted by native artists, the most interesting being those which represent the religious processions, with figures of tom-tom beaters, standard bearers, pikemen, elephants, and devil-dancers.

The exhibits, contained in cases of ebony and satinwood, are grouped around the octagon and wings, consisting, apart from tea and coffee, of native manufactures, works of art, and curios; among them jewelry and the quaintest of carvings in ivory, ebony and cocoanut shells. Of tea there are fifty varieties from twice as many plantations, and in the tea kiosk above the central hall the beverage is served as in Kandy or Colombo. In this apartment are paintings of modern design, its decorations resembling those of the chamber below, but of less elaborate pattern. Recesses are formed by a double row of pillars hung with oriental draperies; and here are tea-poys, or ornamental tables, made of satin and margosa woods.



PRUDENCIA DE MURGUIONDO
URUGUAY

On a triangular site opposite the Fisheries building is a picturesque structure of many colors, towers appearing upon different portions, with a tall spire rising from the centre, the entire edifice being a combination of church and castle architecture. The main hall, hexagonal in shape, is 60 feet across; above it is a cupola, and above this a steeple with flagstaff, from which is displayed the Swedish ensign, some 150 feet above ground. The building was forwarded in sections from Sweden, and so constructed as to represent the style prevailing in churches and country homes in the time of Columbus. Worked



IBRAHIM HAKKY BEY



FISHERIES AND FOREIGN BUILDINGS

artistically into the base of the main façade are specimens of the brick, terra cotta, and cement work produced by the most prominent manufactories in Sweden. Here also, as in the staircase, are tiles of polished cement; but with these exceptions the entire structure is of wood.

The exhibits include one of the most complete collections of Swedish iron, both in the ore and manufactured forms, that has ever been seen in America. The most scientific display, designed to illustrate the metallurgy of iron and steel, is made by the association of Swedish iron masters, the object of which is to promote this industry in every possible way. It advances money to its members to assist them in extending their works, making appropriations also for the purpose of conducting experiments and investigating new processes. Several iron and steel works show iron ores from various mines, such manufactures as ingots and billets of Martin and Bessemer steel, subjected to tests for strength, ductility, and other desirable qualities. Drawn wire and wire-rope, cast steel goods and materials of war, rolled pipes, iron in bars and sheets, hammers and tools for working stone, minerals, and wood, are also displayed, together with engine and car wheels, anchors, anvils, parts of steam engines, and other mechanisms.

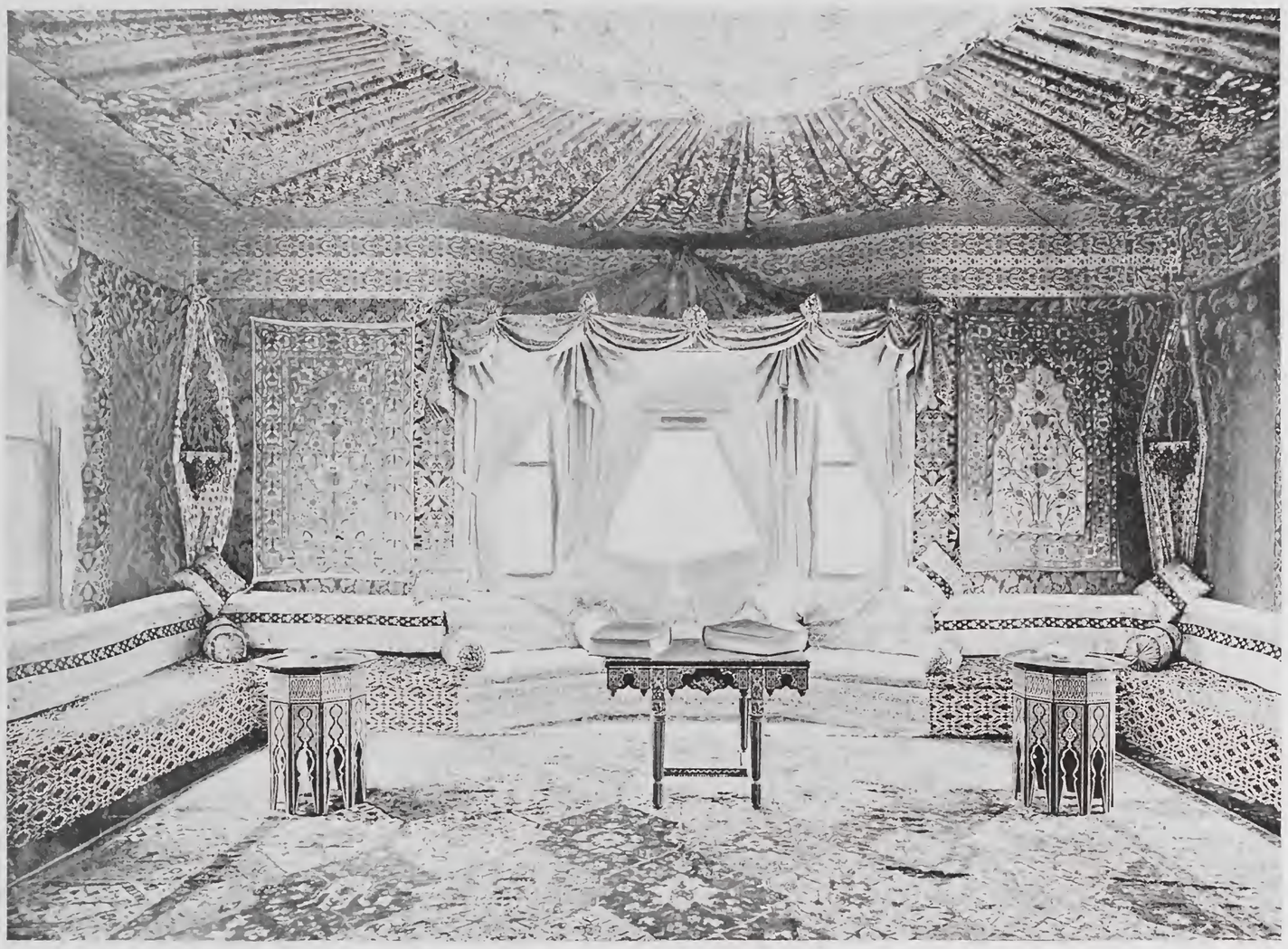


TURKISH EXHIBITS

By the geological department of the government are exhibited glass models and maps of the Gladhammer, Ljusnarsberg, and other mines. There are also earthenware and glass products, gold and silver work, fire and facing bricks, tiles and ornaments for mural decorations, yellow, brown-glazed, and gray-burned; unglazed vessels, pedestals, and garden decorations, as well as glazed earthenware pipes and tubes, pottery for household and chemical uses, and earthenware stoves, table sets, and toilet ware. In the line of glassware are many articles for the table, cut, plain, etched, and gilded, and various exhibition cups for art museums, for which awards were received at expositions held in Paris, Moscow, Copenhagen, Bogota, Philadelphia, and several cities in Sweden. Among objects representing art metal work may be mentioned a buckler of chased steel-plate, with border ornaments in old Scandinavian style, gilt and deeply etched. A viking ship in full sail is seen in the centre, around it a score of scenes founded upon the Saga. Lamps of chased brass and vases of steel attract much attention, with fans and jewel cases of the latter metal, variously etched and gilded. There are also sets of silver church plate, a toilet service of silver gilt formerly belonging to Queen Sophia Magdalena, the reproduction of a cup presented in 1631 to Gustavus Adolphus by the citizens of Nuremberg, and collections of antique drinking cups and jewelry associated with the history of the country. Mention should also be made of the exhibits of wood pulp, wrapping and printing paper, and other factory products for which Sweden is famous.



OFFICE, TURKISH BUILDING



OFFICE OF TURKISH COMMISSION

Elsewhere are imitations of Venetian lace, knitted shawls and coverlets, embroidered underwear, a collection of fans from the Baroness Norderfalk, and an exhibit of hangings, tapestries, and carpets from the Friends of handiwork, a Stockholm association founded a score of years ago for the encouragement of art industry among Swedish women. Private exhibitors also show embroideries in the style of the Lapps, portières, carvings in wood, antique furniture covered with Gobelin and gilt leather, and silk embroideries and screens. Another attraction in the government pavilion is a representation of a Swedish home, in a suite of rooms completely furnished and decorated according to native customs by the Industrial Art society, which in coöperation with agricultural organizations has done much for the improvement of domestic industries. Various manufacturers and house furnishers, as well as makers of curtains, portières, and wall hangings, together with sculptors and painters, add to the exposition of household decorations as understood in this country of home-loving people.

In contrast with these is the exhibit of the Swedish tourists' clubs, showing not only typical costumes and outfits but the attractions offered the pleasure seeker. There are models of snow-skates, toboggans, and sledges propelled by the foot; sections of boats that have been used by the Royal Swedish sailing club ever since its foundation; reproductions of yachts and fishing boats such as ply along the coast of Sweden; skates for racing and for military service, with the sails by which skaters are propelled, and yachts that skim over the ice.



ENRIQUE DUPUY DE LOME

In the background is a large picture of the capital of Sweden with its royal castle, near which are life size figures in wax attired in national garb. In panoramic form are shown a Swedish landscape and a Swedish cottage with its inmates; while of landscape paintings belonging to legitimate art, the best are those of the Ljungans river valley. There are hunting scenes in which the bear and fox are the central figures; Lapps are depicted roaming over



CARLOS R. GALLARDO, ARGENTINE REPUBLIC



THE SPANISH BUILDING



INTERIOR OF SPANISH BUILDING

their snow-covered plains, and on canvas are transcribed the most striking views in the neighborhood of Stockholm, with its approach by sea. In statuary the bust of Gustavus Adolphus is a well executed composition, and in portraiture there are Charles XII and Oscar II. Thus it will be seen that here, as in the palace of Fine Arts, the works of native artists incline to domestic themes and personages.

In the galleries are the exhibits which illustrate the prevailing systems of mental and physical education, together with a large collection of publications, globes, and instruments, forming the Swedish section of the



OFFICIAL RESIDENCE OF GUATEMALAN COMMISSION

Liberal Arts department. From the directress of needlework at the public schools of Stockholm comes a series of models illustrating her system of instruction, while the most approved methods of teaching sloyd are represented by the normal school at Naas. Technical schools and special institutions display the articles made by their pupils, the Agricultural society of Blekinge having a series of models in woodwork, with textile fabrics and objects fashioned of bone. Elsewhere, in drawings, photographs, models, and apparatus, the Royal and other gymnastic institutes show what is being done in the way of physical training.



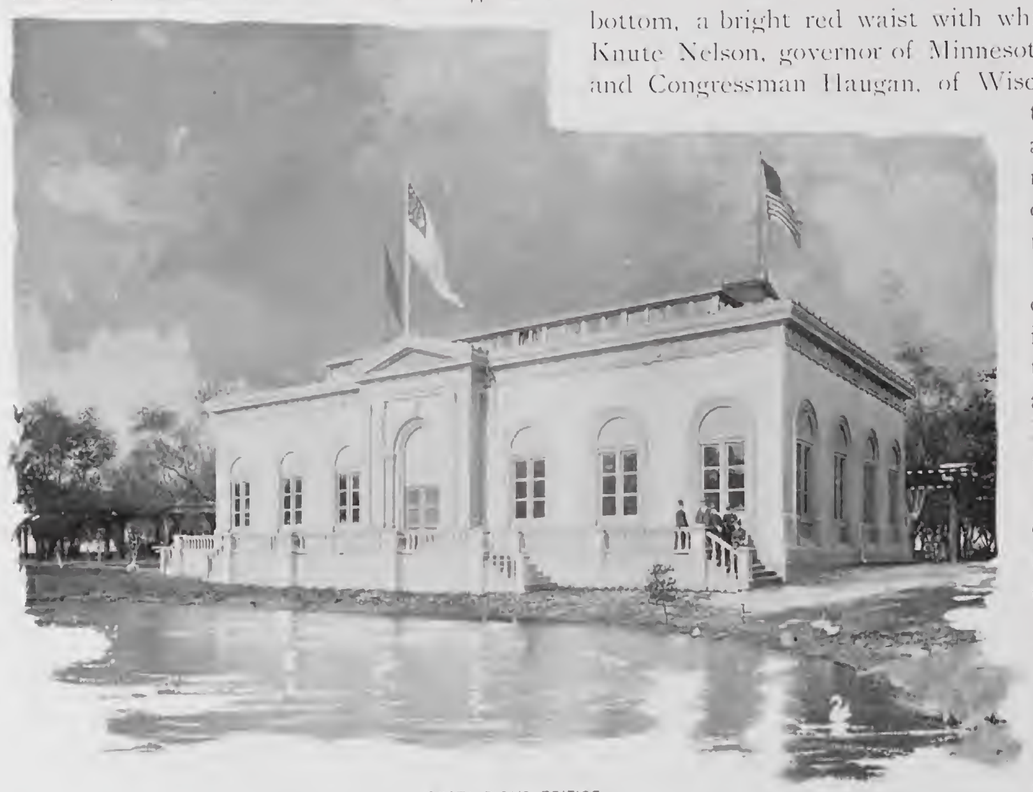
MANUEL LEMUS

Viewed in its entirety, the Swedish exhibition forms a complete presentation of the industrial and social condition of the kingdom, and for this much credit is due to the royal commissioner, Artur Leffler, whose zealous and intelligent efforts are worthy of all commendation. Swedish day fell on the 20th of July, and was quietly celebrated. A parade including many societies was reviewed in front of the national building, assembling later in Festival hall, where a concert was held, after which came fireworks and a procession of floats.

Norways' contributions to the Fair are divided among several departments. Her fisheries' exhibit is one of the best of its kind; in the hall of Manufactures is a large display installed in a pavilion of Norway pine; in the Agricultural section the groups, though small, are remarkable for their attractive setting; while the Norwegian gallery in the Art department is not unworthy of the genius of her

painters. The government building, in which are no exhibits, is a unique composition of the Stavkirke style of architecture, representing a church of the twelfth century, a cross-gabled edifice, with peaks ornamented, as in the days of Leif Erikson, with the prows of Viking ships. It is fashioned entirely of Norway pine, was built in Norway, and is said to be a specimen of the structures manufactured by Norwegian firms for shipment to Mediterranean and other ports. The idea of an old Norse church is also carried out in the interior decorations, in the massive beams and simple but effective carvings.

Several times during the term of the Fair the Norsemen held celebration. The two most noteworthy occasions were the arrival of the Viking ship from Norway, described in the Transportation chapter, and the dedication of the pavilion, on May 17th, in commemoration of the 79th anniversary of independence. The procession, which marched to Festival hall, consisted of Scandinavian workmen, members of Norwegian lodges, riflemen, turners, and a number of girls in native costume—blue skirt, with bands of red braid around the bottom, a bright red waist with white sleeves, and a white apron. Knute Nelson, governor of Minnesota, spoke in his native tongue; and Congressman Haugan, of Wisconsin, and Julius E. Olson of the state university were also among the speakers, the latter making some pertinent remarks on the occasion which they had met to commemorate.



COSTA RICA'S EDIFICE

The Turkish building, opposite the Fisheries pavilion, is a small but unique edifice, typical in style of architecture and with oriental decorations. Its plan is in imitation of a fountain opposite the Babi-Hama-Youn in Constantinople, erected some two centuries ago by Sultan Ahmed III. The exterior is entirely covered with wood carvings executed in Damascus specially for the purpose, and it is estimated that twenty workmen were employed for six months on these panels of intricate design.

The structure is used for displaying the collective exhibits from all the countries over which the star and crescent flies. Most of them are fabrics of such rich texture and intrinsic value that they are protected by glass cases, which form an irregular circle around the room and rise to the ceiling. In the centre is a star-shaped case and around it are grouped the exhibits of mechanical and scientific productions, a display which tells of remarkable progress within the last few years. Turkish rugs and pearl inlaid work from Damascus take the lead, but gold and silver embroidery and silks, ranging in color from the most delicate tints to the most gorgeous hues, occupy much of the space. Chibouques, their long stems covered with gold and jewels, beautiful silver ornaments, bracelets, ear-rings, and the high-heeled pattens worn in Turkish baths, are side by side with ship torpedoes, soaps, scents, minerals, and coffees.

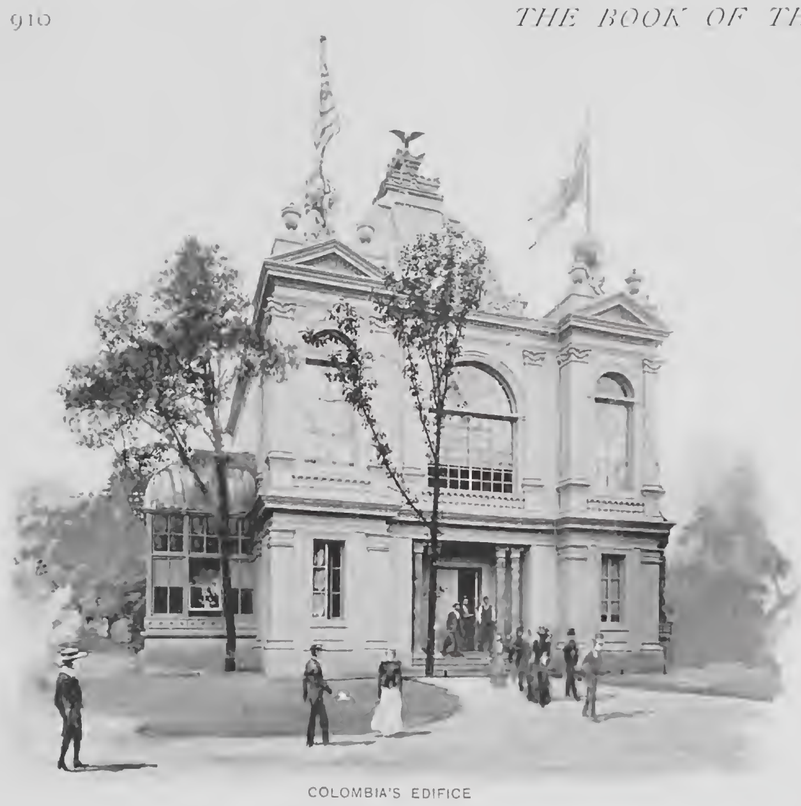
Back of the main building are the quarters of the imperial commission, with offices, a coffee-room, and a large reception room, decorated with gaily-colored silks, embroideries, and tapestry, with divans of oriental fashion, native furniture, paintings, and bric-a-brac.

On the opening day, the 26th of June, the building appeared at its best, and was the theme of general comment by hundreds of foreign and state commissioners, Fair officials, and invited guests. "Long Life to the Sultan," was the inscription above the portals through which they passed between lines of Syrians and Bedouins from the Midway plaisance, gorgeously attired. The visitors were presented to Ibrahim Hakky Bey, commissioner-general, and to the imperial commissioner, Ahmed Fahri Bey, then to the other members of the commission, after which they were escorted through a group of gaily costumed Turks to the reception room, the space between it and the main structure containing a Turkish marquee.



MANUEL M. DE PERALTA

Luncheon was served in Turkish fashion, except that champagne took the place of coffee, and there was music by the Second Regiment band of Chicago. Assisting Hakky Bey and Fahri Bey were several of the members of the commission, Charles Henrotin as consul-general and Sursock Effendi as consul acting as hosts. All the



COLOMBIA'S EDIFICE

Turks wore European costumes, Prince Albert coats, black trowsers, neatly fitting gloves, and on the head a red black-tasselled fez. The ceiling was draped with the rarest of Turkish silks, and the walls were covered with hangings of the richest quality, attendants in the garb of the orient and occident being stationed in the doorways and corners. A few short speeches were made; but there were no formal exercises, and this was declared to be one of the most pleasant receptions ever held in Jackson park.

Spain's official building was modelled after the historic merchants' exchange building at Valencia, known as La Lonja, built in the style of architecture which marked the transition period from the Gothic to the renaissance. While Columbus was in Lisbon, soliciting the aid of king John, the silk merchants of Valencia were negotiating with one Pedro Comté, a leading architect of the day, for the erection of a suitable edifice. In 1482 it was completed; and in its reproduction is well represented the composite architecture of the times. It is a massive structure of buff sandstone, the square tower at one end, the arched doorway, the pointed windows, each terminating in a cross, the fretwork ornamentations, the mail-clad warriors, the figures symbolic of commerce and finance, the heavy cornices, and the parapets solid as those of a fortress, all being faithful copies of the original. The interior is almost devoid of architectural ornaments, except that it is divided in the centre by a row of cathedral-like pillars which extend to the roof, with a series of pilasters on either side. A circular stairway leads to the tower, a fac-simile of the prison used in the original for bankrupt or defaulting merchants.



CARLOS MARTINEZ SILVA



VENEZUELA

In oil paintings, engravings, prints, and photographs are represented many historic and modern incidents and personages. Near the main entrance is a large painting of Ruiz Luna, entitled, "October 12, 1492," showing Columbus and his crew in two small boats, the caravels being anchored in the offing. Elsewhere the discoverer is represented as before the catholic kings, and here is the hall of the ambassadors at Seville, where centres so much of the history of the Columbian era. Moorish palaces and noted battle-fields, with such famous haunts as the garden of the Escurial and the cloisters of the Toledo cathedral, are reproduced in oil and water colors. Rome and Egypt are freely drawn upon for subjects, among them sketches of famous temples, while one of the most powerful paintings in the entire collection is Arpa y Perea's "Pompey's Funeral;" the body resting on a blazing pyre, the stolid Moors seated near by on the banks of Nile, and the pyramids in the distance, as nearly symbolic of eternity as handiwork of man can be. Not far away



THE BRAZILIAN BUILDING FROM THE NORTH POND

the commanding features of Cortés appear in contrast with studies of old-time and modern peasants, Catalan, Valencian, and Andalusian. There are also the interiors of farm-houses, landscapes peaceful and wild, vineyard scenes, and scenes of the mountain and the plain. Specimens of steel and copper etchings are plentiful, and there are drawings showing the plans and decorations of theatres, circuses, hospitals, and public buildings, with carvings in ivory of religious and architectural themes.

La Lonja, it may here be said, was selected for reproduction partly because the Spanish minister at Washington and the commissioner-general, Enrique Dupuy de Lome, were natives of Valencia, the latter preferring as his official headquarters a structure which represents one of the architectural features of that ancient and historic city. The edifice, together with the Spanish pavilions in all the general departments, was



ARCHITECTURAL FEATURES OF THE BRAZILIAN BUILDING

opened by Princess Eulalia on the 13th of June. The ceremonies were of the simplest and without formality, the building being tastefully decorated in honor of the occasion, though only completed a few hours before the arrival of the royal party. The princess passed to the entrance-way between borders of yellow daisies, under a canopy of Spanish and American flags, a military band playing the national anthem of Spain. Then came luncheon and the reception of a few friends, with more music, and La Lonja was open to the public.

First among the headquarters of the Latin-American nations may be mentioned Guatemala's building, near the verge of the north lagoon and southeast of the Art palace. The exterior is of Moorish architecture, with interior plan of home design, and with excellent arrangement for their intended purposes of the roomy and well lighted halls. The structure is of wood and staff, its sides adorned with pictures of tropical plants, of which living specimens are freely displayed in the grounds adjacent, including the finest collection of orchids in Jackson park. In front is a comfortably furnished sitting-room, its walls and columns draped with the national colors. In the centre is an open court, with galleries supported by colonnades, as is the fashion in Spanish-American countries. A terrace extends to the edge of the lagoon, where a landing faces the principal entrance, and for the further accommodation of visitors there is a rustic pavilion partially surrounded with agave and coffee plants, where by waiters attired in the picturesque costumes of the country is served a beverage that rivals the extract of the Mocha or Java berry.



MIGUEL SERRANO, DELEGATE GENERAL FOR MEXICO



M. V. ARIZAGA, COMMISSIONER GENERAL FROM ECUADOR

In common with other Central and South American countries, the exhibits of Guatemala are contained almost entirely within its government building. In the eastern wing a spacious hall is stored with manufactures, relics, and works of art; and here perhaps is the most interesting feature of the display; for while Guatemala is not a manufacturing country, she possesses most of the elements and in embryo many of the industries needed for such development, awaiting only the advent of capital and well directed enterprise. Among the articles arranged in show-cases are silk, woollen, and cotton fabrics, embroideries, clothing, mattings, hammocks of hennequen and agave fibre, musical instruments, crockery, and wooden vessels skilfully carved by hand. Of relics there are pre-Columbian and post-Columbian antiquities, the most valuable of which are included in the archæological collection of Manuel S. Elgueta, while in art there are photographs, statuary, and wax-works, if the last can be said to belong to the domain of art.

In the western wing are illustrated the flora and fauna, the agricultural, horticultural, and mineral products of the country, so grouped as to convey a general idea of its resources. Here are maize, wheat, barley, beans, lentils, sesame, and other cereal, leguminous, and herbaceous plants. There are all the fruits of tropic and



TEMPLE OF HŌŌDEN, JAPAN

temperate climes, with spices, frankincense, oils, dyes, fibres both animal and vegetable, herbs both edible and medicinal, rubber, storax, tobacco, and a large assortment of cabinet woods. Coffee, the staple of Guatemala and forming the bulk of her exports, is largely represented; nor should we omit the samples of sugar and of Soconusco cocoa, the latter in demand wherever cocoa is used as a beverage. Of mineral products there is a valuable collection; for while mining receives but little attention, the country is by no means lacking in mineral wealth. Geological specimens are also numerous, and in map form are further illustrated the geological, as well as the topographical and hydrographical features of the republic.



H. GUZMAN, NICARAGUA

In Costa Rica's home at the Fair is housed a choice collection of exhibits from this enterprising and prosperous nation, the connecting link between the two Americas, and often styled the Yankees of Latin-America. Here is represented a region rich in resources, mineral and agricultural, with plant and forest growth of tropical luxuriance, the former of commercial value for manufacturing purposes and the latter for cabinet and construction timber. In educational matters Costa Rica is far in advance of her sister republics, supporting some 350 primary schools, in addition to high-schools, a university, and national and agricultural colleges, for the maintenance of which was voted in 1892 more than $500,000, or one tenth of the total appropriation. In other respects the country is no less progressive, having a large and increasing trade with Europe and the United States, with excellent postal and telegraph systems, and with railroad connection between the Atlantic and Pacific.

Situated on the eastern verge of the north lagoon, the building forms a neat and airy domicile, with a score of double casement windows and ten large skylights

on the roof. In the front a spacious piazza stands on the brink of the waters, and on each side is a portal flanked by Doric pilasters, above it the shield of the republic in bold relief. The iron frieze and cornices are of tasteful design; the outer surface is painted in effective colors, and the inner walls frescoed in suitable designs. The structure is partially surrounded with trees, their foliage masking the open doors and windows with a curtain of living green. The entire effect is that of a cool and cosey retreat, a pleasant resting place, but one where there is also much of interest, much that is novel and unfamiliar.



A ROOM IN THE TEMPLE

The interior forms a single room or hall, without partitions and with a gallery around its walls. The exhibits suggest a country rich in raw materials, most but not all of which can be manufactured to better advantage by older communities. Coffee and bananas are the staple exports of Costa Rica, and these are freely displayed, together with other products of the soil and sea. Of agricultural and vegetable specimens there are such as are raised in common with other countries, and there is one that is probably found in no other country. This is known as "vegetable ivory," almost as hard and white as tusk of narwhal, but nevertheless a seeding plant and one that is now being cultivated for manufacturing purposes. Of rubber there are many kinds; of medicinal plants a large variety, and among woods there are mahogany, as common almost in Costa Rica as the oak in Pennsylvania, and the cedron, whose surface when polished shows colors such as no painter can depict.

Of exhibits of metals and minerals there are gold, silver, nickel, copper, lead, iron, zinc, sulphur, and bismuth: these with clays, building stones, and earths of commercial value being widely distributed in Costa Rica and in paying deposits. Manufactures are shown for the most part in primary forms; but there are jewelry, hardware, and cabinet work of excellent quality, with intricate and ingenious designs in sea and tortoise shells. Of raw silk there are several cases and of textile fibres, both animal and vegetable, there is a liberal display, the latter, when passing into domestic use, being fashioned into the roughest of home-made clothing.

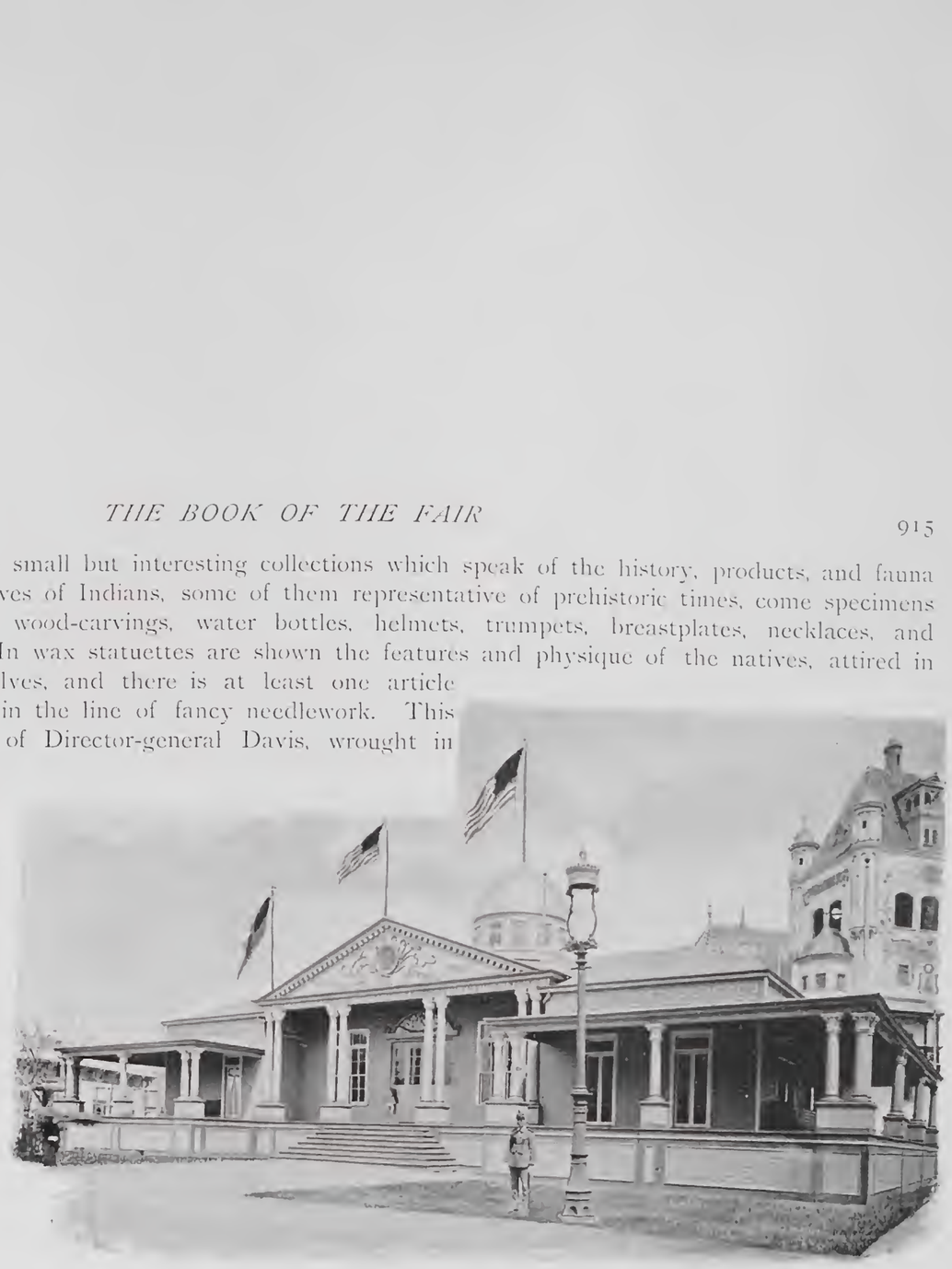
In the gallery are landscape and other paintings by prominent artists, with portraits of historic personages, the former representing mainly the scenic wonders of the cordilleras. Here also is a collection of birds, indigenous and some of them peculiar to Central America, as the kelzal, a large and beautiful species with brilliant plumage, but one that cannot live within a cage, and hence was adopted by Guatemala as one of the emblems impressed on her seal of state. There are also varieties of the canary, which in Costa Rica is plumed in yellow, black, or white, and again in a mixture of all these colors. There are no live birds or beasts within the building, except for a cage of diminutive monkeys, with abnormal tufts of hair crowning their tiny and wrinkled foreheads. Finally there are ethnological and educational exhibits, the former consisting mainly of Indian relics and weapons.



GROUP OF JAPANESE

Almost facing the Guatemala building is Colombia's tiny home at the Fair, a white two-story edifice, dwarfed by the towering structures of Germany and Sweden. In style it is of the Italian renaissance, a domical glass roof rising abruptly from the centre surmounted by the national emblem, a condor with outstretched wings, on either side of which is a group of figures supporting a globe, and above this a flag-staff whence the national colors are displayed alternately with the stars and stripes. In the panels under the dome are inscribed the names of President Nuñez and Vice-president Coro, with those of Bogota, the capital, and the nine political departments.

On the ground floor are small but interesting collections which speak of the history, products, and fauna of the country. From the graves of Indians, some of them representative of prehistoric times, come specimens of idols and images, pottery, wood-carvings, water bottles, helmets, trumpets, breastplates, necklaces, and bangles and anklets of gold. In wax statuettes are shown the features and physique of the natives, attired in garments fashioned by themselves, and there is at least one article which is proof of native skill in the line of fancy needlework. This is a silk-embroidered portrait of Director-general Davis, wrought in colors from a photograph taken by a female artist of the Quimbaya Indian tribe. Colombian coffee, especially such as is raised in the vicinity of Bogota, is prominently displayed, while cotton, another staple export, is exhibited in such manufactured forms as hammocks and clothing. There are also not a few specimens of gold; but more beautiful than all is the collection of moths and butterflies native to the country, and with all the rich hues which nature lavishes on the insect life of the tropics.



THE HAYTIAN BUILDING

For Venezuela's mansion was erected a one-story building of marble in three divisions, with Græco-Roman façades and domical roofs, those above the wings being surmounted with statues of Columbus and Simon Bolivar. Within is sufficient evidence that the latter is held in esteem, not only in his native country but in Peru and elsewhere, as the hero of South American independence. A sword with 1,400 brilliants, a belt with three-score precious stones, a saddle cloth weighty with golden braid, and "El Sol de Peru," ablaze with diamonds, are all presents from the Peruvians, whose liberty he won in the campaign which ended at Pichincha in 1822. There are also the swords that he used in action, and on one of the walls is the banner which Pizarro carried to conquest, presented nearly three centuries later to the national congress, by congress to the marischal de Ayacucho, and by the marischal to Bolivar. Finally there is a medallion portrait of Washington, a present from his family and handed to the deliverer of five republics by Lafayette, thus linking together the three central figures in the achievement of New World liberty.

The material riches of Venezuela are freely displayed in her classic pavilion, tastefully decorated in yellow, blue, and red, colors symbolic of the state. First among the raw products is coffee, of which 1,500,000 bags a year are exported or consumed. There are also silk, wool, cotton, and other fibres; native woods, including dye-woods; tonka beans and tobacco; oils, gums, and nuts. Of minerals there are asphaltum, petroleum, and copper ore, the last from a mine which is said to be the second largest in the world. Of manufactures there are chocolates, starches, soaps, hammocks, basket-work, and leather in several forms, with saddles mounted in silver and embroidered in silk.



HAYTIAN EXHIBITS

But the art collection is the feature in Venezuela's pavilion; this, as I have said, being excluded from the general display, through tardy application for space, though belonging to the department of Fine Arts and as such examined by the international board of judges. There are but twenty-five works in all, and with only six artists represented; their paintings grouped in the main hall around a central dais. First among them may be mentioned Cristóbal Rojas' "Purgatory," a vigorous but grewsome composition, showing the souls of men and women writhing amid the flames, an angel hovering above with messages of peace which fall on ears that cannot hear. This work, as is related, cost the artist his life; for in order to give realism to his conception he studied daily for several hours the effect of the flames in Parisian smelting works, inhaling the poisonous atmosphere and thus inviting the attack of consumption which



A. VON PALITSCHEK-PALMFORST, AUSTRIA



J. PERRENAUD, SWITZERLAND



H. E. P. GLOUKHOVSKOY, RUSSIA



V. I. SHOPOFF, BULGARIA



GEORGE BIRKHOFF, JR., NETHERLANDS



D. JANNOPOULO, GREECE



MARQUIS ENRICO UNGARO, ITALY



A. MACKIE, MONACO



A. B. KING, LIBERIA



J. J. QUELCH, BRITISH GUIANA



E. R. GROBLER, ORANGE FREE STATE



PHRA SURIYA NUVATR, SIAM



CHUNG KYUNG WON, COREA



W. E. ROTHERY, LIBERIA

ended his career. In all his works is a certain sadness of tone; for the genius of sadness possessed him, even at the time when he was sent as a student to Paris to complete his training at the expense of the Venezuelan government.

Arturo Michelina, who now stands at the head of the Venezuelan school, has several canvases showing his range and grasp of art. His portrait of Bolivar is the only one exhibited in the art chamber; but there are others elsewhere in the pavilion. In "Charlotte Corday Going to the Scaffold," the central figure is passing through the door of her cell, the eyes of a young artist following her with fixed and sorrowful gaze, while the jailer is carelessly lighting his pipe; for to him such scenes are of daily occurence. "Penthesilea" is one of Michelina's strongest works, and here the Amazon queen is represented not as Virgil describes her:

Penthesilea furens, lunatis agmina peltis,
Ducit Amazonidum.

She is wounded and some of her followers are bearing her from the field, while all around her the battle rages, and men and women lie prostrate dabbled in their blood. "Charity" is a most powerful study, and by many considered the best of Michelina's canvases. A woman is lying on her death-bed, with a child at her side, and except for the pallet on which she rests, there is no article of furniture and not a morsel of food in this home of poverty and woe. A lady and a little girl are entering the room with relief that comes too late, and the look in the eyes of the dying woman is one that they will never forget.



THE WHITE HORSE INN

The Brazilian building is the most ornate of the South American pavilions, one in which the artificer has given full rein to his fancy; for by the Exposition management there were no restrictions as to the designs of state or foreign structures; only that they must be attractive and in harmony with the general plan. In style it is of the French renaissance, nearly 150 feet square, and surmounted by a dome 120 feet in height from floor to finial, around which are campaniles, each with an open observatory. On each face are columns of the Corinthian order, and on the façades and the stylobate of the dome are Indian and other figures symbolical of the republic. The ground floor is almost without partitions and devoted mainly to the exhibit of coffee. On the upper floor the assembly room is handsomely draped and furnished; in its centre a group of palms and ferns, above which is a figure of Mercury. There are also ladies' reception parlors, and in rear of the building is an annex where by native waiters is served such coffee as nowhere else can be had; for as the Brazilians claim, the art of roasting the berry and preparing the beverage is unknown in the United States.

In the central hall are more than 2,000 specimens of the 370,000 tons of coffee yearly produced in Brazil, or about two thirds of the world's supply, one half of it coming from the state of St Paulo. The samples are ranged in glass jars grouped on tables or in pyramidal form, and represent the greatest of Brazilian industries; for nearly all the coffee sold as of the Mocha or Java varieties comes from the southern republic, whose choicer products are not inferior to either.

In addition to the Brazilian collection in the palace of Fine Arts there is one of equal merit in the government building, including Pedro Americo's famous painting of the "Proclamation of Brazilian Independence" by the emperor in 1822. "Tiradentes," by Aurelio de Figuerdo, represents the execution of this proto-martyr of Brazil. Antonio Parreiras has three canvases, one of which is a "Panorama of the City of Nictheroy." Insley Pacheco has a number of landscape views, most of them from the neighborhood of Rio Janeiro, whose harbor is the most picturesque in the world. Among portraits is one of General Deodoro by Henrique Bernardelli,



TONKIN COLONY BUILDING

and by Girardet is a medallion of Benjamin Constant, leader of the revolution by which Dom Pedro was deposed.

The Japanese commissioners erected as their headquarters a small structure near the northern extremity of the wooded island, where it is partially concealed by trees and shrubbery. In the vicinity is the temple of Phœnix, called Hōōden in honor of the mythical bird of Japan, and in part a reproduction of the historic edifice of that name built more than eight centuries ago at Uji, the original of which is still in a fair state of preservation. It is of two stories, with a wing at either side and a corridor at the back; its design prepared by the government architect of Japan, the interior decorations supplied by the Tokio academy, and the furniture and works of art by the Imperial museum. In the architectural scheme are illustrated three historic epochs. The main hall represents the style of the Tokugawa period, dating back a century and a half, reproducing the sitting-room of one of the great lords of these days. The south wing is planned as in the Ashikaga era of the fifteenth century, and the north wing after the golden or Tujiwara era of 850 years ago. Native woods form the body of the temple, its roof being covered with sheets of copper. The ceilings of the main hall are divided into panels of lacquered wood, those of the two side rooms being elaborately decorated with phœnixes in gold and colors, with similar figures on the walls and sliding doors.

Near the German building Hayti erected a modest pavilion of the southern colonial style; with broad piazzas on three of its sides and surmounted by a central cupola, from the flagstaff of which is displayed the national standard in horizontal stripes of red and blue. Above the main portico is the coat-of-arms, and below it, in gilt letters, the words République Haitienne, with the figures 1492, 1892, and 1804, the last referring to the acquisition of independence. Of the interior space a large portion is occupied by a central hall, draped with festoons of colors, and in the centre a statue of "Rêverie" by a native artist. Relics are freely displayed; among them the rapier of Toussaint L'Ouverture, while others refer to the Columbian era and to the aboriginal inhabitants, including one of the anchors lost from Columbus' flag-ship in 1493, the other being placed at the entrance to the convent of La Rabida. There are also portraits and busts of prominent men, as of the Haytian liberator, of the first president of the republic and of Frederick Douglass.

All that Hayti has contributed to the Fair is contained within her pavilion, where first of all are native woods, some polished and others in their natural state, the most massive specimen being a huge block of mahogany. There are also minerals, fibres, needlework, laces, embroideries, and various articles of manufacture, especially in leather, including some highly finished saddlery. Coffee is a feature in the display, and of this there are some two-score varieties, the beverage itself being served in an apartment in rear of the hall. Of sugar there are numerous samples, these with syrups, liquors, liqueurs, and a few other articles completing the Haytian exhibits.



JAPANESE TEA GARDEN

World's Fair Miscellany.—The French colonies are represented at the Fair by several buildings, among which may be mentioned those of Tonkin, Tunis, and Algeria. The first is identical with that which was erected for the Paris Exposition of 1889. It is a rectangular structure, its interior partially finished in walnut, with stained glass windows, and is covered with Chinese hieroglyphics, some of which date back to the days of Confucius.

In connection with England's participation in the Fair may be mentioned the White Horse inn, a reproduction of a famous hostlery at Ipswich, where excellent meals and the choicest of liquors were served at somewhat extravagant prices. But to many the main attraction was the barmaids brought from England for the occasion. All were of the better class, never indulging in flirtation, and serving their tankards of ale or glasses of mulled port or claret, in the making of which they were spe-



REAR ADMIRAL MAURITY

cially skilled, with strict attention to business. They were well-favored lasses enough, bright-eyed, buxom, and trig; each with light auburn hair, for this was a necessary qualification, and in neat but orthodox attire, with bib and apron of spotless white.

James Shanks, lord-mayor of Dublin with his wife and party, among whom were two Irish members of parliament, arrived in Chicago on the 25th of September and met with a cordial welcome, being entertained as guests of the city and the World's Fair directory. Before the celebration of Irish day, in which he was the central figure, the mayor paid several visits to the Exposition, and on the 28th was invited with his party to a luncheon given by Sir Richard E. Webster, chairman of the royal commission, and Sir Henry Trueman Wood, its secretary. In the afternoon they attended a reception at Lady Aberdeen's village, tendered by Mrs Peter White, its manager. At night the mayor and several of his party were feasted by the city council. There were flowers in profusion, with music by Tomaso's mandolin orchestra, and the choicest of viands and liquors, among them "punch à la Shanks," of which his lordship doubtless partook. There was also speech-making, of course, but not enough of it to mar the feast. Other banquets and receptions were given by Sir Richard, who was appointed attorney-general during the first of Salisbury's terms, and is the youngest man who ever held that position. He is a gifted orator, and except perhaps for Sir Charles Russell, none stand higher in the profession, whose members say that it is almost impossible to draw up a document or prepare a case in which he cannot find a serious flaw. This the American advocates found to their cost during the sittings of the Bering Sea commission; for while all were able lawyers, they were no match for the ex-attorney-general. Of the Fair Sir Richard remarked: "The architecture is simply marvellous in its beauty, and the vista down the lagoons and the effect of the buildings from the water is beyond description. Surpassing even the dreams of oriental dreamers is the effect in its entirety of this wonderful Exposition."



S. TEGIMA, JAPAN

tion from the thousands of his countrymen who were present. The Bohemian societies gave an exhibition of athletics in the Live-stock pavilion, in which the participants were of both sexes.

August 31st, the thirteenth birthday of Wilhelmina, queen of the Netherlands, was a feature among the foreign celebrations. Exercises at Festival hall inaugurated the day, the chairman being George Birkhoff, commissioner-general and consul. After speeches, varied with music, the assemblage adjourned to the Javanese village, which was closed to all but the Dutch and their descendants. Here they were entertained by native dancers and musicians, drank coffee, and enjoyed themselves to their hearts' content.

On Mexican day, the 4th of October, the celebration was warmly supported by the Exposition management; for Mexico was among the first of the nations to respond to their invitations to take part in the Fair. Miguel Serrano, commissioner-general rang the liberty bell; Commissioner McDonald of California welcomed the Mexicans, and after music by one of their most famous military bands President Palmer welcomed them again. In the recital and music halls Mexican shields and flags were profusely displayed, together with the stars and stripes, while bronze busts of Hidalgo, President Diaz, and Washington were objects which spoke of the friendly relations between the two republics.



SCENE WITHIN THE JAPANESE GARDEN



FRANCISCO E. BUSTAMAULE

The 12th of August was Bohemia's day at the Fair, and an important occasion it was; for, as stated by Lieutenant-governor Jonas of Wisconsin, the orator of the day, the Bohemian population of Chicago is greater than that of any city in the world, with the exception of Prague. At the exercises in Festival hall he said it was eminently fitting that such a day should have been named by the management, as the exposition of the industries and arts of Bohemia held at Prague in 1791 was the first of the kind in history. Antonin Dvorak, the famous composer, was leader of the orchestra, and received an ova-

Guatemala's inaugural day, the 3d of July, was celebrated with simple but impressive ceremonies, attended by many of the foreign commissioners and the leading officials of the Fair. Two days later the Costa Rica and Venezuela buildings were formally opened. At the former there were no special exercises, M. M. Paralta, as United States minister, welcoming his guests in brief and courteous phrase. Consul-general



CHARLES A. PRESTON

Saldivia spoke on behalf of Venezuela, Francisco E. Bustamaule, his associate commissioner and minister at Washington, accepting the building on behalf of his government. Costa Rica's celebration was held on the 15th of September, the day on which Central America declared her independence in 1821. There was a reception in the state pavilion, attended by many of the foreign commissioners and Fair officials, including the Board of Lady Managers.

Colombia dedicated her home on the 20th of July, the 83d anniversary of her independence or rather of its declaration; for freedom was only purchased after a cruel and protracted war. As head of the commission, Parlos Silva delivered the principal address, the sons of President Nuñez being among his audience. Brazil opened house on the 19th of July, and held celebration on the 7th of September, on which day of 1822 Dom Pedro I, governor of what was then a Portuguese colony, receiving word from his father, the king, that the liberties of the country were to be curtailed, proclaimed its independence. On the former occasion the only speech was by Lemos Basto, president of the republic. On the latter there was no speech making; merely a concert in the music hall, followed by a reception in the government building, Rear-Admiral Maurity being president of the commission.

On a plat of ground sloping gently to the banks of the lagoon, between the Brazilian and the Fisheries buildings, are two small structures of wood and bamboo enclosed by a low, light fence. Here is the Japanese tea house; its floors covered with matting, cushions, and arm-rests, for the accommodation of those who would partake of the beverage as prepared and served by native attendants.

Of the many banquets tendered by foreign commissioners none exceeded in luxury, taste, and hospitality the one given by the Japanese commissioners, Tegima and Matsudaira. For the occasion the banqueting hall of the Auditorium building was ornamented with the flags and shields of all nations, prominent among which was the banner of Japan, with its disk of red on a field of white. The balcony was draped in crimson velvet, and on a line with the columns which supported it was an array of wonderfully decorated vases, filled with lilies and begonias. On the tables were smaller vases containing flowers of every hue; elsewhere rose-bushes and orange-trees were disposed at intervals, with a background of palms and laurels. The guests were welcomed by Tegima, who called attention to the Japanese Exposition to be held in Kiôto in 1895, commemorating the 1,100th anniversary of its selection as the national capital. In response, Thomas B. Bryan, as chairman, spoke of the generous part which Japan had played in the affairs of the Columbian Exposition.

Hayti dedicated her building on the 2d of January, the 19th anniversary of her independence, Frederick Douglass, one of the commissioners, with Charles A. Preston as associate, delivering the opening address, to which Director-general Davis responded. A special fête day was appointed for the 16th of August, when there was a reception in the state pavilion, followed by a banquet at the Richelieu hotel.





CHAPTER THE TWENTY-SIXTH

THE WORLD'S CONGRESS AUXILIARY

OF the origin and purposes of the Congress Auxiliary, its scope and character, mention has been made in an early chapter of this work, in connection with Exposition management. As stated in substance by the officials themselves, its general objects may thus be briefly recapitulated. As an adjunct or supplement to the Fair, it was intended to provide for a fitting representation of the intellectual and moral progress and condition of the civilized world, with the assistance of the foremost men and women in each department. Here was a convenient time and place in which the members of kindred organizations might assemble for the consideration of living questions relating to every phase of civilized life; might prepare and in a measure secure the execution of more comprehensive plans than had ever before been formulated "to promote the progress, prosperity, unity, peace, and happiness of the world."

It was in truth an ambitious programme; but one which, as I have said, received the endorsement and coöperation of acknowledged leaders in every sphere of human thought and achievement. It was, moreover, a novel feature in the annals of international expositions; nor was it merely an appendage but an integral part of the Fair, one sanctioned by congress and authorized by the directory. Here expression was given to the subjective, just as in the material display were expressed the objective conditions and relations of modern civilization. Of those who attended or took part in the meetings a large proportion were foreigners, and to many the congresses were the most interesting portion of the Exposition. Coming as they did from cities better governed, more favored as to social environment, and with more of the comforts and amenities of life, they had now an opportunity such as never before existed for investigating, discussing, and comparing with their own the political, industrial, and other aspects of a nation whose existence is counted by decades instead of by centuries, and yet has solved not a few of the problems with which the old world is struggling.

The congresses were held in the Art institute recently erected on the lake front, in the business quarter of Chicago, and containing two large auditoria, named Columbus and Washington halls, each with a seating capacity of 3,000 persons, these with smaller chambers permitting a series of meetings to be held simultaneously. Funds for the occasion were in liberal supply, the Exposition directory contributing $200,000, or one fourth of the total cost of the building, on condition that it be placed at the disposal of the congresses during the term of the Fair. The total attendance at all the sessions of the various departments was little short of 1,000,000, of whom at least two thirds were women, the audiences being mainly composed of the more intelligent classes, whether Chicagonese or pilgrims of the Fair.

As first it was organized, woman was entirely unrepresented in the Congress Auxiliary; and as in other departments, the prominent part that was later accorded to women was largely due to the efforts of Mrs Potter Palmer, as president of the Board of Lady Managers. Addressing a letter to the authorities, she asked that women and their interests be represented at its gatherings. The request was granted without demur, and it was further stated that no committee of women had been appointed merely because such a demand had been anticipated, the managers preferring that the suggestion should reach them from those who had women's interests in charge. Thereupon a woman's branch was established, with Mrs Palmer as president, and as vice-president Mrs Charles Henrotin, than whom none are better versed or more deeply interested in social and humanitarian questions. The result was not only a congress of representative women, attended by women from every quarter of the world; but that in the nineteen congresses held between May and October for the discussion of subjects ranging from political science to household economics, women took part in all but three, these being electricity, engineering, and real estate.



COLUMBUS HALL

First on the list were the congresses of representative women, their formal opening being on Monday, the 15th of May, and their sessions lasting the entire week. As stated by Mrs Henrotin, their purposes "included a presentation of the different fields of work in which women were extensively engaged, either as teachers, workers in the trades, in the liberal professions, or in philanthropic work." Though up to the middle of May the average attendance at the Fair was less than 30,000 a day, against 270,000 for its closing month, the women's congresses were far more successful than many that were held much later in the season. This was due not only to the fusion of the more important women's associations throughout the United States, but to the participation of foreign societies, whose representatives were here in force. On the first day the exercises began with an address from the president, Charles C. Bonney, who reviewed the origin and development of the Congress Auxiliary, presenting briefly an outline of its general plan, and acknowledging his indebtedness to eminent men and women for their suggestions, encouragement, and coöperation. As president of the woman's branch, Mrs Palmer delivered an address of welcome, followed by Mrs Henrotin and Mrs May Wright Sewall, who spoke of the part that women would play in the congresses. Then came the introduction of foreign representatives, with responses on behalf of foreign countries, this being continued at the evening session. Here was manifested the world-wide participation in the congresses; for among those introduced were women from nearly all European countries; from Canada, Iceland, Australia, and South America; other sessions being attended also by women from India, China, and Japan, from Mexico and Central America, though from the United States came more delegates than from all other countries combined.



MRS CHARLES HENROTIN



GEORGIA CAYVAN

On the following day an address was delivered in Washington hall by Elizabeth Cady Stanton on the civil and social evolution of woman, followed by one from Marie Stromberg on the evolution of the Russian woman. At the evening session Julia Ward Howe spoke of the moral initiative as related to woman, and Kate Tupper Galpin of California, on the ethical influence of woman in education. In Columbus hall the subjects treated were woman in relation to government and civil law, to science and industrial economics, one of the best papers being read by Lady Aberdeen, who selected as her theme woman as an actual force in politics. Thus the sessions were continued throughout the week, the topics covering the range already indicated. Señorita d' Alcala lectured on woman in Spain for the last four centuries; Madame Quesada and Baroness Wilson on woman's position in the South American states; Madame Janauschek described woman's place in the legitimate drama; Georgia Cayvan, the stage and its women; Modjeska, the endowed theatre,



MODJESKA

and Clara Morris, woman in the emotional drama. An interesting paper on a century of progress for women in Canada was read by a representative of the dominion. Others were on woman as a religious teacher, an educator, a writer, an artist, and in relation to trades and professions. These, however, form but a portion of the questions considered, the reading of some of the papers being followed by brief discussions on their subject matter.

Meanwhile other sessions and informal conferences were held in the minor halls, at which was treated even a wider range of subjects, one of which related to woman's dress and especially to dress reform. Lucy Stone advocated the Bloomer costume which years ago, in conjunction with Susan B. Anthony, she tried in vain to introduce, while Frances M. Steele would have her sex return to the clinging, transparent drapery of the Greeks. At these auxiliary meetings were represented many women's associations, clubs, and leagues, among the speakers being Julia Ward Howe, Susan B. Anthony, Florence Fenwick Miller, Mary Livermore, Laura Ormiston-Chant, Clara Barton, Mary Frost Ormsby, Jane Cobden Unwin, and others too numerous here to be mentioned. On the Sabbath services were conducted entirely by women, a feature being the Marche Triomphale, rendered by the largest harp orchestra ever assembled in the United States.



CLARA BARTON



MOORISH GIRL

Next to the congresses of representative women came those of representative journalists belonging to all departments of the press, the daily and weekly journals, religious, professional, trade, and scientific journals, with magazines and periodicals. As stated by the management, it was intended to provide for a proper presentation of the work and influence of the public press; to bring the most active and potent agencies of public opinion into more harmonious and useful relations, and as far as practicable to enable those who attended to see and hear the masters of journalism. The themes to be discussed were not chosen for special writers, but the writers for the themes, all the topics being carefully considered and the best men selected to give them fitting expression. Among them were the origin and development of the press; its duties, rights, and privileges; its legal and moral responsibilities; together with the art of news gathering, of reporting public proceedings, and of editorial comment.

On the 22d of May the press congresses were formally opened with an afternoon reception, followed in the evening by addresses of welcome and other speech-making. On the following day a session was held in Columbus hall, William P. Nixon as chairman introducing Alexander McClure, editor of the Philadelphia *Times*, who contrasted the power of the press and pulpit, claiming that the press had done more to conserve and liberalize the pulpit than all other causes combined. In other vein spoke Murat Halstead, who has been termed the field-marshal of journalism. "There is a tendency," he said, "to claim too much for our work. Those of the press, if they are wise, will not assume that they are dedicated or consecrated more than other folk. They are not a sacred tribe nor a holy order, and though it may be well to urge reform, it is not well to make a fad of crusading. If the press would guide it must not drive, and while some have too little sincerity, others are earnest over much."



MURAT HALSTEAD



WILLIAM T STEAD

By each department of the press, religious, scientific, commercial, and others, separate meetings were held, some of the foremost journalists in Europe and the United States taking part in their proceedings; such men as M. de Blowitz, correspondent of the London *Times*; William T. Stead, editor of the *Review of Reviews;* John Brisbane Walker of the *Cosmopolitan;* Albert Shaw and Irving Brown of New York, and Joseph Howard, these being but a few of the men who passed a pleasant week in friendly intercourse, in sight-seeing, feasting, and merry-making.

Women were largely represented at the press congresses, holding separate sessions by day and attending at night the general meetings held in Columbus or Washington hall. The subjects discussed related to women's work in journalism, their duties



CENTRAL COURT FROM ROOF OF MANUFACTURES BUILDING

responsibilities, and qualifications; what they could do in each department as news gatherers, as critics, editors and publishers. Then there were considered what may be termed the ethics of journalism; matters pertaining to personal fitness and conduct, with the relations of journalists to society, and especially how news may be obtained without violating the sacred privacy of home. Among the speakers were Mary H. Krout, chairman of the woman's committee, Helen M. Winslow, Kate Field, Mrs Frank Sheldon, Mrs Pauline G. Swalm, Mrs J. C. Croly, Mrs Lilian Whiting, Catherine E. Conway, Clara Bewick, and Susan B. Anthony. At the general sessions for men and women there were no prolonged debates; controversial points were avoided, and the problems of journalism freely and impartially discussed by the foremost members of the profession.



KATE FIELD

In the medical congresses which followed, a wide range of subjects was considered, both of a popular and scientific nature, including not only medicine and surgery, but dentistry, pharmacy, and medical jurisprudence, public health and the effect of climatic and geographical conditions in relation to health. Though many eminent men were present, the regular school of physicians was but imperfectly represented, for before the announcement of the medical congresses arrangements had been made for a general meeting in Rome. The eclectics and homœopathists predominated, the congress of the latter being in connection with the American institute of homœopathy.

At the opening session, on the 29th of May, there were the usual addresses of welcome, Marie E. Reasner speaking for her sex as chairman of the congress of eclectic physicians, while Alexander Wilder claimed that in the eclectic school, as founded by Americans, lay the hidden secrets of the art of healing. In the afternoon the homœopathic hospital, near the Woman's building, was dedicated as official headquarters, and earlier in the day the homœopathic congress was inaugurated in Washington hall, with J. S. Mitchell as chairman and Julia Holmes Smith in charge of the woman's branch. In the hall of Columbus the congress of medico-climatology also held a session, among the speakers being Charles C. Bonney, Carter Harrison, and Roland G. Curtin, president of the National climatological association.



THE COLUMBIAN FOUNTAIN

Throughout the week the several sections of the medical congresses presented topics of general, as well as of special interest. Women had much to say about the ills of their sex and of their offspring, especially as to the use of tobacco and liquor by fathers and of tea and coffee by mothers. Improper food and the nursing bottle were pronounced to be the cause of many of the diseases common to children, accounting also for weakly muscles and

awkward gait. Such matters were considered as the relation of homœopathy to public health, the future of the school and its status in European countries. The afternoon sessions were devoted to subjects classified under the sections of surgery, gynecology, materia medica, clinical medicine, ophthalmology, otology, laryngology, and pædotrophy, the last named department being the one in which women explained their theories as to the scientific nourishment of children. During these meetings the fact was noticeable that surgery in relation to other branches of medical science occupied most attention, and the same remark applies to the deliberations of the eclectic physicians and surgeons, their sessions concluding with the proceedings of the surgical department, of which R. A. Gunn of New York was president.



ANTHONY COMSTOCK

But of all the sessions perhaps the most popular were those in which representatives were present from India, China, Japan, Australia, Hawaii; from Russia, Italy, France, Switzerland, and other European lands; from South and Central America; from Mexico, and from every state in the union; physicians from all parts of the world assembling together to tell what they knew as to the effects of meteorological conditions on the human system. By one was discussed the effect of altitude upon heart and lung diseases, or a combination of both; by others the influence of elevated regions in relation to various ills. The results of bathing were considered, and the advantages and disadvantages of sea voyages, while even such lofty themes were propounded as planetary influence upon the human body. The world itself was treated geographically, and those who knew whereof they spoke informed their hearers on such specific matters as the cause of eye diseases in Russia and Japan, and the effects of Chicago climate on the nasal and respiratory membranes. Consumption was a favorite topic, theories supported by arguments and statistics being advanced as to the influence of climate on this disease in the United States, in Canada, Mexico, Europe, China, India, Japan, Siberia, Africa, and Australia. Exercise and occupation were deemed important considerations in the treatment of consumption, and an instructive sub-topic was developed in the suggestion of national reservations for consumptives.

What may be termed a side issue of the medical congresses was a session of army surgeons, held in the Government building on the 9th of August, with Surgeon-general Senn as presiding officer, and attended, as were all the rest, by men of eminence in their profession; but as this was convened only for the discussion of special topics, and of little interest except to military men, it needs no other than passing mention. In the same month two days were devoted to the consideration of medical jurisprudence; much of the time being given to discussing the legal value of expert medical testimony. The degree of responsibility attaching to criminals of unsound minds, or when under the influence of liquor was among the mooted points, as also were the effects of opium on public health and morals, and the mysterious power of hypnotism, the latter treated solely from a scientific point of view.

During the first week of June was held a congress on social purity, Archbishop Ireland delivering the principal address at the opening session. The social evil was the main topic under consideration, and especially the licensing of that evil through legislative enactment. From England came a paper by Mrs Josephine E. Butler on parliamentary recognition of immoral practices, and by other speakers were treated the regulation system in France, Germany, and British India. At a session held under the auspices of the Woman's Christian Temperance union, one of the participants described her experience in connection with the Protective agency for women. Doctor de Costa spoke of the origin and purposes of the White Cross movement, introduced by himself and now freely aided by the churches, though without denominational bias.

The temperance congresses were held under the auspices of home and foreign temperance organizations, the representatives of many nations taking part in the discussions. As yet neither prohibition, local option, nor high license have gone far to remedy or even to check the evil; and if in cities and states where prohibition laws are in force, the drinking habit is less prevalent than elsewhere, statistics do not show it. It was to consider the causes and remedies for this common failing of humanity that the congresses were assembled, Archbishop Ireland and Frances E. Willard, as presidents of the men's and women's conventions, arranging the necessary details.



MARY LIVERMORE

In truth it was a worthy purpose for which they were assembled, and one that called for earnest consideration as among the most necessary and yet the most backward of social reforms. While the temperance movement is almost a century old, it is very far as yet from converting the world to its cause. It was in 1808 that the first temperance association in the United States was formed in the New York town of Greenfield. Others followed quickly; but of all the doctrine was the moderate use and not the entire disuse even of distilled liquors, no restrictions being placed on indulgence in fermented drinks. That the crusade was not thus far of a serious nature appears in the by-laws of one of the societies, where, as a penalty for becoming intoxicated, any member so offending is required to treat all the other members. It was not until near the middle of the nineteenth century that the word "teetotaller" came into use, or that total abstinence was preached or practised even by a few. Thenceforth the movement rapidly increased,



FRANCES E. WILLARD

organizations multiplying throughout Europe and the United States, with a total membership amounting far into the millions. Nevertheless the use and abuse of liquor has grown with the growth of population and of wealth, the sum thus yearly expended in the United States approximating the amount of the national debt, while in Great Britain, Germany, and Russia the consumption of intoxicating beverages is even on a larger scale.

At the temperance congresses held in June a feature was the convention of the Women's Christian Temperance union, at which, as vice-president, Lady Henry Somerset presided, in the absence of the president, Frances E. Willard. First spoke Charles C. Bonney and Mrs Potter Palmer as presiding officers of the Auxiliary and of the woman's branch, followed by Mrs Henrotin and Doctor Strong, after whom Lady Somerset paid eloquent tribute to her colleague and later read her report. Archbishop Ireland briefly addressed the meeting, and at the first day's session delegates from England, France, Australia, Canada, Iceland, and Japan told how the work was progressing in other lands. The following day was mainly devoted to business, varied with brief addresses, the reading of one of the reports being interrupted by a memorial service in honor of Mary Allen West, who, as a missionary of the union, journeyed more than 3,000 miles in Japan, and after delivering nearly 100 addresses, died among those whom she had converted to the cause of temperance.



SUSAN B. ANTHONY

Among the speakers was Susan B. Anthony, who also discoursed upon the question of woman suffrage. John Hall of New York delivered a brief address of congratulation and was followed by Wilbur F. Crafts of Pittsburg, who proposed that in 1,900 a series of meetings lasting the entire year be held at different points throughout the world. As superintendent of her department, Mary A. Hunt reported that a law had been passed in all but six of the states and territories providing for the instruction of pupils in what is termed scientific temperance, 13,000,000 children thus receiving a compulsory training which, it was hoped, would act as a safeguard against the use of liquor. Colonel Parker, grand secretary of the order, acted as spokesman of the Good Templars, who, he said, were working on parallel lines with the union. As wife of a former prohibition candidate for the presidency, Mrs Bidwell spoke a few words on behalf of her husband. But perhaps the most telling speech of all was by Madame Zelma Borg, the Finland delegate, who declared that too much attention was being paid to the moral aspect of intemperance, and not enough to the physical. "Don't harp so much" she



VIEW FROM WOODED ISLAND



IN THE NEIGHBORHOOD OF MACHINERY HALL



CONGRESS OF KING'S DAUGHTERS AND SONS

exclaimed, "on this devil, devil, devil business. Drunkenness is a physical defect, and our doctors should be brought to treat it as such." Thus the sessions were continued, the subject being treated in all its aspects by some of the foremost champions of the cause.

In the middle of June were held the congresses relating to moral and social reform, covering a wide range of subjects from philanthropy in its broadest sense to the management of soup houses and newsboys' homes. But as to the scope and purpose of these congresses I cannot do better than quote the words of Mrs James M. Flower, chairman of committee, by whom in part they were organized. "This department," she says, "includes the public treatment of pauperism; the care of neglected, abandoned, and dependent children; the care and treatment of juvenile delinquents; the hospital for the sick; the training of nurses and dispensary work; the commitment, detention, care, and treatment of the insane; the custodial care and the training and development of idiots and feeble-minded children; the prevention and repression of crime; the punishment and reformation of criminals, and the organization and affiliation of charities in cities. The department further includes the work of benevolent orders and associations of all kinds whose efforts are directed to the amelioration of social conditions."



MRS JAMES M. FLOWER

Many were the associations represented at these meetings, and as most of them were controlled by women entirely or in part, the papers read were mainly prepared by women. Among those which attracted most attention was the congress of king's daughters and sons, an international organization of which nearly a thousand members were present. The opening was of a religious character, beginning with the singing of the "Coronation hymn," after which came scripture reading by Mary Lowe Dickinson and prayer by Isabella Charles Davis. Mrs Henrotin spoke a few words of welcome, and was followed by Mrs James M. Flower, chairman of the congresses. As president of the order, Mrs Margaret Bottome spoke of the benefits which it had accomplished, telling of the letters she received from women far removed from all social privileges, yet in touch with the world through the efforts of the society, and aiding its cause so far as lay in their power. Other papers were read on this and the following day; Mary Lowe Dickinson, recording secretary, giving an outline of the work accomplished; Mrs Elizabeth M. Tilley speaking in behalf of Canada; Mrs Ida G. Stewart for Illinois; Miss M. Schott for Philadelphia; and Mrs Margaret P. Bronson, who represented California, presenting to the president a Maltese cross of rare pebbles in the name of the members of the golden state.



MARY LOWE DICKINSON

At other congresses, both general and sectional topics of interest were also discussed. At the international congress of charities, correction, and philanthropy, a powerful address was delivered by Mrs Emily E. Williamson, whose theme was "private unofficial supervision of public institutions in coöperation with official boards." On the subject of hospitals in relation to the public health a carefully studied paper was read by John S. Billings, an army surgeon, after which Henry C. Burdette, a specialist in London hospital work, spoke of hospital finances, and Colonel Nalter of the medical staff of the British army, on the applicability of hygiene to the conditions of modern warfare. A speech that called forth much discussion was on pauperism in the light of the theory of natural selection, by D. G. Ritchie of Oxford, England. On municipal reform a stirring dissertation was given by C. H. Parkhurst, whose persistent efforts in this direction have won for him more than a national repute. These, however, are but a few of the subjects presented, their general range being indicated in the remarks above quoted, all the topics mentioned by the chairman, to whom was largely due the success of these congresses, being treated on broad lines, and by men and women well informed on the matters whereof they spoke.



EMILY E. WILLIAMSON

Next were held the congresses of commerce and finance, including among other subjects, railroads, boards of trade, banking, insurance, and building and loan associations. At the opening session the chairman spoke the usual words of welcome, George R. Blanchard, who responded on behalf of the railroads, reviewing briefly the history of railway transportation from 1828, when on the 4th of July, Charles Carroll of Carrollton, laid the corner stone of the Baltimore and Ohio line, until in 1893 more than 175,000 miles of track connected every portion of the union. On behalf of the board of trade, George F. Stone, its secretary, stated that in 1892 the board had distributed 256,000,000 bushels of grain and 14,000,000 animals on the hoof or as meat products. The cause of building and loan associations was championed by Julius Stern; insurance by John H. Nolan, and mercantile credits by P. R. Earling, who quoted the statement of Webster that credit did a hundred times more to enrich the nations than all the mines in the world.



P. R. EARLING

The meeting of bankers and financiers on the 20th of June was among the most interesting of all the sessions of the Auxiliary; for here was considered one of the leading issues of the day, Horace White of New York speaking of the gold standard and of the silver question as one who had the subject well in hand. It is somewhat remarkable, however, that neither at this nor at any other of the financial congresses was the real aspect of the silver question considered, as related to the appreciation in gold. This is simply that the production of silver in proportion to gold is and long has been in quantity as about 33 to one and in value as more than three to one, with a coinage for the last twenty years nearly thrice as large as for the twenty years preceding. Silver has declined for the same reason that iron has declined, or that breadstuffs have declined; mainly because the production of silver, as of iron and breadstuffs, is greater than the world requires.



HORACE WHITE

Other addresses were by Lyman J. Gage, chairman of the congresses, Charles Parsons of St Louis, Bradford Ross of New York, and J. J. P. Odell of Chicago. At a session of financiers held on the 22d speeches were delivered by Davis Page of Philadelphia, J. W. Vernon of Providence, R. C. Lake of South Dakota, and J. W. Blake of Texas, Mrs Henrotin speaking on the subject of women investors, and surprising her audience at the financial standing of women as shown by the reports of women presidents and cashiers of banks. On the same day the railroad and insurance men were in convention, W. G. Veazey and John W. Carey representing the former. For the latter Charles E. Kremer read a paper prepared by E. J. H. Woodbury of Boston on electricity as a fire hazard, stating that the danger depended largely on insulation, and whether the electricity were generated in the building or came from a distance. Thomas J. Borden spoke of the method of reducing fire losses, which in the United States average about $125,000,000 a year. Wooden buildings, he said, could be rendered almost as safe as fire-proof structures; but so far as possible the wood must be placed horizontally, for fire burns faster upward than in any other direction.

Banking, financial, railroad, and insurance congresses were continued on the 23d and following days, the subject of mercantile credits also receiving attention, with P. R. Earling as presiding officer. In his opening address Charles C. Bonney declared that as to the granting of credit the supreme quality to be considered was moral integrity, without which no credit was possible. H. N. Higinbotham stated that credits were too easily obtained, and often as injurious to the receiver as to the giver. Goodman King selected as his topic the mercantile agency system; its origin, usefulness, and suggested improvement; tracing that system from its foundation to its present phenomenal development, a single institution now expending $3,000,000 a year in procuring information for its patrons. On the books of two such institutions were the names of 1,300,000 firms, the changes often amounting to 3,000 a day. So perfect was their organization that the failures among those reported favorably amounted to less than one per cent a year.



J. J. P. ODELL

At the congress of building and loan associations, this being not the least interesting among the group, Mrs Mary B. Morrell of Little Rock spoke of woman's place in this relation, claiming that the system was originated by a woman who aided her tenants in laying aside a monthly sum against a time of need. The total investments made by women in building and loan associations amounted to more than the national debt, and women were therefore entitled to a proper representation in the affairs of these institutions. Charles N. Thompson contrasted their benefits to the working classes as compared with savings banks, and in another address was explained their economic value to the entire community.



W. H. RHAWN

A few days before the close of the Fair the American Bankers' association held its annual convention,



LOOKING EASTWARD FROM CANAL AND BRIDGE

postponed for the first time since its organization in 1875, on account of the severest financial disturbance that had befallen the country for a score of years. The sessions were held in the Art institute, with a muster of about 500 delegates representing every section of the United States, though as yet the panic had barely spent its force and the after effects were severely felt throughout the land. Remedies were suggested by many speakers, of whom some were among the foremost of American financiers. As president of the association, William H. Rhawn stated that during this crisis more than 700 banks, with liabilities exceeding $180,000,000, were involved in suspension or failure. James H. Eckels, controller of the currency, spoke at length in favor of a bimetallic currency, on behalf of which he advanced some forcible arguments. Allen R. Foote of Washington pleaded for a sound currency and banking system, for which purpose he urged the appointment of a non-political national commission. George A. Butler of New Haven advocated a practical plan of banking and currency, proposing several amendments to the national banking act. The average reserve, he said, wherewith to meet a sudden and unexpected strain, should be at least 25 per cent, with a larger reserve in commercial cities; such reserve should be freely used when necessary and promptly restored as soon as the emergency is past. Other measures were suggested by George S. Coe of New York; by William C. Cornwell, who would permit the issue of notes by properly capitalized and inspected banks, and by Thomas R. Patton, who spoke of the danger of making collections by circuitous routes.

At the following session Joseph C. Hendrix, president of the National Union bank of New York, contrasted the recent panic in Australia with that which had occurred in the United States, remarking that the overwhelming disasters of the former country were largely due to the lack of such financial coöperation as prevailed in the latter. Horace White was in favor of an elastic currency, the prime requisites of which were that no improper limits be placed upon it, and that it be issuable at once as the demand arose. E. O. Leach, a colleague of Hendrix' explained that the financial stringency was by no means due, as was commonly supposed, to an inadequate volume of metallic currency, of which there was more than at any time in the history of the world, the total in November, 1892, amounting to $7,633,000,000, against $3,400,000,000 in 1860. Lyman J.

Gage delivered the closing address, after which officers were elected, N. N. White of Cincinnati being chosen president and J. J. P. Odell of Chicago first vice-president.

In connection with the financial congresses was treated in its financial aspect the question of roads, E. H. Thayer of Iowa stating that the most conservative estimate placed the loss to this country, through bad and insufficient roads, at $250,000,000 a year, approximately divided among the people in proportion to individual expenditure. The remedy, he said in substance, was not a question of increased taxation, but of using to the best advantage the money annually contributed by the people for road purposes. It was within bounds to put the sum spent each year in the maintenance of country roads at $80,000,000, and as a rule it went each year to keep company with the $250,000,000 devoured by mud. Except for thinly settled and mountainous regions, every mile of road used by the public and made a thoroughfare by law could be built of stone or gravel, made durable and permanent, and always in condition for the heaviest wagon loads of produce or merchandise. This could be accomplished within a reasonable time and without an additional dollar of taxation; merely through the proper use of the taxes already paid, with the assistance of a little skilful financiering, the borrowing, for instance, of money at low rates of interest, on bonds issued by counties or their subdivisions. Employment would thus be furnished for surplus labor; the money of the people would be kept in circulation, and thrift and prosperity go hand in hand with the prosecution of the work, followed by perpetual benefits to every business interest.



GEORGE F. ROOT

During the term of the Fair Chicago became the centre of musical activity; for here were nearly all the prominent musical associations of the United States, with not a few from foreign lands. At the congresses held the first week in July, and at numerous entertainments given throughout the season, was represented more than a century of musical progress, from the time when Squire Elijah Dunbar led through the intricacies of oratorio chorus the Stoughton Musical society, organized in 1786, their successors still meeting, as did the charter members, for "an annual supper of hot turkey, with nothing stronger than tea or coffee." The Handel and Haydn society of Boston, founded in 1815, sent a portion of its celebrated chorus under the leadership of Carl Zerrahn, while the Chicago orchestra, established in 1891, with Theodore Thomas as conductor, gave expression to the musical taste and talent of the west. At the congresses many branches were illustrated and discussed, from musical literature, art, and criticism, to the management of opera houses, with orchestral art, organ and church music, and choral music and training.

The congresses were opened as usual by C. C. Bonney, E. M. Bowman, president of the American college of musicians, delivering the customary address of welcome, and speaking of the history and aims of the institution. Others spoke in similar vein, suggesting that the college be chartered by congress and thus assume a national character. On the following day the Music Teachers' National association was in session, Bowman as its president, Theodore Presser as its founder, and several others tracing the progress and operations of the society. On the 6th a concert was given, a programme in which were the works of eminent composers being rounded by the contributions of the Thomas orchestra, while on the following day were selections from Glueck's *Orpheus* by Tomlins' chorus of more than 1,000 voices. On the 6th was held a convention of Illinois music teachers, who afterward rendered a symphony of sacred music, followed by a concert representing the works of Illinois composers.

Musical education was freely discussed, George F. Root, a pioneer teacher of music, being chairman of this congress. Many were the remarks as to the power of music as a medium of education and as to its formative influence on character, Jenkin Lloyd Jones speaking in answer to the question, what if music were not in the world; while James R. Murray read a paper on the power and effect of music, in which he took the ground that music neither expressed nor originated anything, but that it called forth the ruling affections. An interesting session was that at which were discussed Indian and folk song in music. The paper read by Alice C. Fletcher of Peabody museum, who for years had been living and studying among the western tribes, was especially instructive, her remarks being practically illustrated by a young Omaha Indian. John C. Fillmore and H. E. Krehbiel expanded on the subject, the latter dwelling on the part which negroes have taken in the folk songs of America. A paper on early phases of American music, by Louis C. Elson of the Boston conservatory, contained several humorous features, his rendition of "Old Hundred," as it was played by the puritans in 1673, causing much merriment. The addresses delivered at this session were interspersed with classical selections rendered by Clara Krause of Berlin and by the Hamburg Buelow orchestra, thus bringing into striking contrast the music of primitive and cultured peoples.



ELIZABETH C. CARPENTER

Journalism in relation to music was one of the subjects considered, such points being discussed as the mission of the musical journal and the function of musical criticism in newspapers. Teachers told what they knew of musical instruction in public schools and how to raise the standard of instruction. In the last two days of the congress was considered the condition of musical education in various states and



NORDICA

countries from the standpoint that music should form a source of mental discipline.

During the musical congresses three special days were set apart for women Mrs. Elizabeth C. Carpenter, as chairman of one of the conferences, speaking on the subject of women as musical composers. Luisa Coppiani suggested numerous points as to the phonation and guidance of the voice, severely condemning the explosive method of training and recommending that children be taught to sing by note at an early age. Music as a factor in philanthropy was a topic which related to the experiences of Charlotte Mulligan among the working people of Buffalo. The literary portions of the programme were interspersed with vocal and instrumental renditions. On the second of the women's days a paper was read by Camilla Urso, who urged the employment of women in orchestras as a remedy for careless instrumentation. Lillian Nordica told by proxy what she knew about women on the lyric stage, and Mrs. Theodore Thomas spoke of the influence of amateur clubs on musical taste.



W. D. HOWELLS

On the 5th of September was held a Welsh festival of song, in connection with the Eistedfodd congress of music, painting, and literature, the proceedings calling to mind the days when Druid priests and bards chanted their prophecies in the forest depths of ancient Britain. Upon the sward in front of the government building twelve upright stones were erected as altars around a more massive one in the centre, the chief bard proclaiming, as in the days of yore, the Eistedfodd or gathering of bards, and offering a prayer that peace and brotherly love might attend the festival. To this his twelve assistants, representing the months of the year, responded by placing their hands on the sword held aloft by the other. Then from the main altar spoke each bard in turn, and concluding, was robed by the ancient maids of Cambria, the chief in white, the twelve in blue, and all with coronets of oaken leaves. Later there were exercises at Festival hall, the feature of which was the singing of male choirs in competition for prizes. At night a concert was given, at which was rendered for the first time in America the cantata of Prince Llewellyn, a composition dear to the hearts of Welshmen.



MRS CLARA D. BATES



LEW WALLACE

At the reception which opened the literary congresses a few eminent writers were greeted by hundreds of their readers, the assemblage adjourning later to Columbus hall, where C. C. Bonney delivered the address of welcome, for the nonce in metrical phrase. Charles Dudley Warner responded, and other speakers were Richard Watson Gilder, Max Richter, Kate Field, and Walter Besant, who touched on the work accomplished by the London society of authors, with its membership of 1,000 men and women, remarking also that the time had come when literary congresses should be held at regular intervals, with a view to fostering wholesome literature and satisfying the 120,000,000 readers of English-speaking race.

Copyright was the subject considered at the first session of the authors' congress, George E. Adams, as chairman, choosing for the theme of his opening address future copyright legislation in the United States. He compared the copyright law with the patent law, with which it had much in common, and expressed the hope that a modus vivendi would be reached satisfactory to the reading public and to the authors and publishers of Great Britain and the United States. Other addresses and papers were by Sir Henry Bergne, George W. Cable, S. S. Sprigge, Watson Gilder, Hamlin Garland, A. C. McClurg, President Adams of the university of Wisconsin, and Professor Loundsbury of Yale, all agreeing that from the law of copyright should be expunged the clauses relating to simultaneous publication.



GEORGE W. CABLE



EDWARD BELLAMY

At the following session, author and publisher and the British society of authors was the theme of a carefully written paper by Walter Besant. The functions of

criticism was the subject of an address by Charles Dudley Warner, who spoke many wholesome truths, though handling somewhat roughly the literature of the United States. An instructive essay on criticism as an educational force was read by Hamilton W. Mable, and other interesting papers were on woman's mission in Italian literature by Madame Salazar; on modern fiction by George W. Cable; on the relations of literature and journalism by H. D. Traill of London; and on the future of the English drama by Henry A. Jones. In connection with the authors' congress children's literature was discussed in one of the minor halls, Mrs Clara D. Bates presiding, with Eugene Field, Hezekiah Butterworth, Mrs D. Lothrop, and Mrs Peattie among those who spoke or recited.



HENRY DRUMMOND

In the department of history James B. Angell, as presiding officer, delivered an opening address on the inadequate recognition of diplomatists by historians; Mrs Ellen H. Walworth explained the value of national archives to a nation's life and progress; American historical nomenclature was treated by A. S. Spofford, librarian of congress, in a paper read by George E. Adams, and Frederick Bancroft spoke of Seward's policy toward the south. The present status of pre-Columbian discovery was the theme selected by James Phinney Baxter, Prince Henry the navigator by E. G. Bourne; the economic conditions of Spain in the sixteenth century by Bernard Moses; the union of Utrecht by Lucy M. Salmon; the historical significance of the Missouri compromise by James A. Woodburn; these and other subjects and speakers, too numerous here to be mentioned, adding to the interest of the sessions, two of which were specially held by women.



W. F. POOLE

At the congress of librarians Melvil Dewey, president of the American Library association, reviewed the progress of libraries since the first convention of librarians was held in New York in 1852. In an interesting treatise F. M. Crunden sketched the ideal library and librarian, and among other themes were state library commissions and national bibliography. In the department of archæology and philology there were lectures on the social status of women in ancient Egypt; on the romance of archæology; on Schliemann's excavations at Troy; on Vedic studies; on Assyrian tablet libraries, and on "Cyprus, the bible, and Homer," the last by Max Richter, who stated that no country was richer than Cyprus in relics illustrative of the old testament. W. C. Winslow also read a paper on old testament history in the light of modern discoveries, and there were others on linguistic and grammatical subjects.

Folk lore was one of the most interesting of the literary congresses, William I. Knapp of the university of Chicago welcoming the delegates to the third annual session of the International Folk Lore society, while F. S. Bassett, chairman of committee, spoke briefly of this branch of literature. "Unspoken," a paper written by Walter Gregor, a Scotch clergyman, explained how Scotch peasants cured toothache and more serious ailments by certain rites and incantations, and how to Scotch lasses were revealed the features of their future husbands, with other curious superstitions. In his "Notes on Cinderella," E. S. Hartland stated that there had been several hundred Cinderellas, not a few of whom were of the male sex. Mrs Anna R. Watson discoursed on comparative Afro-American folk lore, repeating some of the quaintest of negro legends, and calling attention to the resemblance between them and those of the Finns and American Indians. The cliff-dwellers was the subject selected by Mrs Palmer Henderson, who claimed that they were of Caucasian and not of Indian race, in some respects well advanced in civilization and in others strangely primitive, even for a people whose homes were probably built before the erection of the pyramids. A lecture on the myths, symbols, and magic of East Africans by Mrs French-Sheldon was illustrated with



NORWEGIAN COSTUMES



VIEW FROM THE EAST TOWARD THE ART BUILDING

many curiosities collected in the dark continent by this famous explorer, who also displayed the flags which she carried as safeguards through the heart of Africa.

By Vice-president Abercrombie were described the doings of the ancient Finns, their wizards and witches, their gods, their myths, and traditions. Among other papers were those on superstitions of the races of the Northwest by James Deans; on sacred objects of Navajo rites by Washington Matthews; creole folk songs by George W. Cable; the folk lore of the negro by Mrs Anna R. Watson; Voodooism by Miss Mary A. Owen, and Japanese folk lore by W. E. Griffiths. The sign language of the Indians of the plains was described by Lieutenant W. E. Scott, four chieftains seated on the platform answering by signs the questions propounded by the lecturer. Bulgarian wedding ceremonies were illustrated by Wulko I. Shopoff, at whose side were natives attired in wedding costumes.



A BY-PATH IN JACKSON PARK

At the educational congresses, formally opened on the 17th of July, with Bishop Fallows in charge, their sessions continuing until the close of the month, were represented all branches of education and almost every land with an educational system worthy of the name. Teachers have met in convention almost since the time when our public school departments began to take form and shape; but never before has the subject been treated on such broad lines, including all grades and branches, from the kindergarten to the university, and from business colleges to institutions for the defective classes. Just as the educational display was the crowning feature in the department of Liberal Arts, so were the educational congresses, together with the musical, literary, religious, and other conventions with which they were allied, among the most attractive of the World's Fair parliaments.

After the formal opening in Washington hall, followed by an evening reception, the kindergarten teachers and workers were first in session. W. N. Hailman, who delivered the opening address, selected as his theme the essentials of Froebel's work, whose influence is still more widely felt than that of any other educational reformer. It was the recollection of his own sufferings as a child that made of Froebel the children's apostle, one who had ever their cause at heart and was always at their service. From the day when he entered the village school, of which he was considered the biggest dunce, until he concluded his university career with a brief imprisonment for debt, Friedrich Froebel found nothing in school or college to satisfy what he termed "his inner life." It was in his solitary rambles amid the Thuringian forest that his real education was received. Here he communed alone with nature, learning from the plants and trees the lessons that nature teaches, and here it was that he conceived the great idea of his life. Like Comenius, who lived two centuries before, he looked to nature for the true principles of all education. As he who tills the soil creates nothing in the trees and plants, so, he considered, the teacher creates nothing in his pupils, merely aiding the development of inborn faculties, especially through arousing voluntary activity.



W. R. HARPER

The kindergarten congress was largely in the hands of women; for to women this branch of education is almost entirely relegated. But not alone to this department was woman's participation limited, more than a hundred papers being read during the first week's session of the special congresses by women prominent in the educational circles of Europe and the United States, while at the international congress many of the speakers were of the female sex. Of the general committee Mrs H. M. Wilmarth was chairman; of the kindergarten committee, Mrs E. W. Blatchford; of the congress of higher education, Mrs Harriet C. Brainard, and of that of college fraternities, Miss Ethel Baker. The congress of representative youths, held on the 18th, was intended only for children and those who were to entertain them, Bishop Spaulding, who delivered the principal address, stating that he had many times been asked to speak before the congresses, but had declined all previous invitations, accepting this one because he would rather appear before such an audience than before all the kings and princes



MADONNA

By Gustave Doré



WILLIAM T. HARRIS

in the world. At the sessions of educators for the blind W. H. Millburn, "the blind chaplain of congress," was the presiding officer, speaking in mellow and resonant voice, with slow deep utterance and in well chosen phrase.

The sessions of the international congresses, attended by delegates from many countries, were held under the auspices of the American National Educational association, of which William T. Harris is president. Numerous were the questions handled simultaneously in the halls of the Art institute; the programme for the 26th of July, for instance, including university, college, academy, seminary, common school, and kindergarten topics, while on the following day were treated, in addition to some of these, musical, technological, industrial, manual, and business training, with physical education and rational and experimental psychology. John Eaton, formerly United States minister of education, stated that while 100,000,000 pupils were receiving rudimentary instruction in all the countries of the world, more than twice that number had no instruction of any kind. A paper was read by the Russian professor Ergraff Kovalevsky as to what should be added to the usual elementary course to meet the industrial needs of localities or race characteristics. Francis A. Walker, president of the Massachusetts institute of technology, reviewed the progress of technological instruction during the last quarter of a century, stating that there was a great demand for students who had received a technological training, and dwelling on the importance of such training in these days of keen competition.

Martin Kellogg of the university of California spoke in favor of a comity of intercourse among universities, in place of the present rivalry. They should be of one spirit rather than of one type, and each should have a type of its own, aiming at the highest that was attainable on its own proper lines of development, and striving after special excellence only in certain portions of the wide field of knowledge. This paper aroused much discussion among those who would have our universities continue to box the educational compass, as now they do, their studies covering or pretending to cover almost the entire realm of science and literature. In the department of secondary instruction the following will serve as specimens of the subjects treated and discussed by some of the foremost educators of the day: Should algebra or geometry; should Latin or some modern language come first in the course of secondary schools? Should the amount of time given to languages; should the amount of time given to mathematics be diminished, in order to make room for a more extended course in physics, botany, and chemistry? While these are proper subjects for discussion, they do not strike at the root of the question, which is rather in the method of teaching than in the subjects taught. Latin, modern languages, mathematics, natural science, these and many other branches may be used to good advantage; but less for the slight knowledge actually acquired than as instruments for training the mental faculties. Here is the main purpose of all true education, and while a judicious selection of themes is of course an inporatant factor, it matters far less what is taught than how it is taught. Above all is needed a simplification of text-books, whose rules and definitions should be few and brief; clear but concise in expression, and stripped of all useless verbiage.



PORCELAIN VASE, BERLIN

Of the congress of business and commercial colleges the main purpose, as stated by the committee, was to explain the evolution, courses of study, methods of training, management, utility, influence, and defects of such institutions. In connection with them was considered the work of schools of stenography and type-writing, and of associations of business educators.

By Earl Barnes of California was read before the psychological section an interesting paper on children's theology, containing the results of actual inquiries among thousands of children from six to fifteen years of age. Most of the answers represented God

as a good and great man, with little reference to sterner qualities. Many of the conceptions were vague and shadowy, and some were positively ludicrous. "He can stand on the ground and reach the sky with his hands," said one. "He can look through a key-hole" said another. Heaven was described as a city, a palace, or a park; its location just above the earth, though some placed it in one of the stars, and a few on earth itself. "Whether they go to school there," answered a little girl, "I do not know; but I think they must; for they are so patient and good." Occupation in heaven was a subject that troubled the little ones, not a few of whom spoke of the monotony of celestial life. "I should like to visit heaven," remarked a boy of twelve, "but only for a short time." Angels were described as women, fairies, or birds; but never as men. The devil and his abode were represented in the usual fashion; but these were not often mentioned, and only by children under ten years of age; the orthodox Satan, with his realm of brimstone and fire, being discredited by those in whom the rational faculty was in a measure developed.



OCTAVE CHANUTE

Before the project for a Congress Auxiliary began to take definite shape, a meeting was held of some of the most prominent of American engineers with a view to holding special congresses in connection with their profession. It was then determined to form an association of the various engineering organizations in the United States and Canada, and to extend invitations to leading members of the profession in every quarter of the world. Funds were liberally provided, among other purposes for the entertainment of visitors, and soon it became apparent that here would be one of the principal features of the Auxiliary. It was at first intended to make of these congresses a subdivision of some department of science; but at a meeting of delegates held in May, 1891, it was resolved "that the importance of engineering entitles it to the place of an independent department in the World's Congresses." The resolution was approved by the authorities; circulars were issued, and a programme prepared including the divisions of civil, mechanical, mining, metallurgical, military, and marine engineering, with engineering considered as a branch of education and as a profession. On these subjects were read some 220 papers in all, many of them being followed by discussions.

At the opening session in Washington hall, Charles C. Bonney and Octave Chanute, the latter as chairman of the meeting and president of the general committee, discoursed on the dignity and utility of the profession. Sir Benjamin Baker, as vice-president of the British institution of civil engineers; Baron de Rochemont for France; Alfred Nyberg for Russia; C. O. Gleim for Germany; Hugo Koestler for Austria, and Celso Capacci for Italy, all spoke of the interest manifested in these congresses, as a part of the great series planned for the interchange of thought among the foremost thinkers of the world.

As with other departments, the sessions of the various divisions were held in separate halls; but of the many topics considered only a brief synopsis can here be given. At the mechanical congresses, with Eckley B. Coxe as president, was recommended the adoption of an international system of testing materials, and this was followed by a discussion of the various methods of testing locomotives, while at other times were debated their limitations as to speed. Among other subjects treated were oil-line pumping engines, evaporative surface condensers, water meters, calorimeters, and ammonia motors.

In the division of civil engineering, of which William Metcalf was presiding officer, the navigation system of France was explained by F. Guillain, inspector-general of roadways and bridges; F. A. Pimental, a civil engineer of Portugal spoke of the road, river, and railway communications in his country, and a counsellor on buildings to the Prussian government illustrated the plan of the railway terminal at Altona, whereby through a system of over and under grade structures, all surface crossings were avoided. At another session E. A. Kempus and C. A. Huet discussed the improvement of the North sea canal in Holland, the Lower Weser and its improvements being described by German experts. As an instance of the cosmopolitan character of these gatherings it may be stated that on one occasion papers were read in person or by proxy from citizens of New York and Chicago, of Germany, France, Great Britain, Portugal, Mexico, Chile, and New South Wales, the topics varying from railroads to the uses of Portland cement.



COLONEL H. L. ABBOTT

At the joint sessions of mining and metallurgical engineers, of which Henry M. Howe was president, a Washington statistician, in an exhaustive paper on the geological distribution of metals, showed that between 1792 and 1890 the United States had produced nearly one third of the world's supply of gold and more than one fifth of its silver, the proportion having largely increased within the last score of years. The lead region of southwestern Wisconsin, the lead and zinc deposits of the Mississippi valley, and the Bertha zinc mine of Virginia were also among the subjects discussed. G. Chesneau of Paris spoke of the ventilation and safety of mines, and the detection and measurement of fire damp. The leading part which electricity was destined to play in mining was food for much speculation based on the inventions of recent years. Improvements in the handling and reduction of ores were considered, and an entire session was occupied in discussing the different methods of manufacturing steel. Richard Akerman described the Bessemer process as conducted in Sweden, and H. H. Campbell



ROBERT H. THURSTON

considered the open-hearth process in a paper which was both practical and scholarly.

In the departments of military and naval engineering, with Clifton Comly and George W. Melville as presidents, the entire subject of coast defense was reviewed, and especially were considered the merits and demerits of the systems adopted by the United States and Great Britain. Colonel H. L. Abbott of the United States army was of opinion that on account of the facility with which troops could be concentrated by rail upon any given point, there was little danger of invasion. Our greatest need was to prepare against naval attacks, and to that end it was necessary to protect our cities from distant bombardment from the ocean; to bar the passage of fleets through narrow channels leading to strategic points, and to close wider entrances leading to important land-locked bays or sounds. Major G. S. Clarke discussed the matter from the British point of view, stating that since the United States navy could not obtain control of distant seas, except in alliance with some European power, it should be held available for home defense. The natural policy would be to trust to the navy for the protection of the coasts and to provide fixed defenses only for the rendezvous and depots of its fleets.

At one of the sessions were discussed the modern infantry rifle and the wounds which it inflicted, comparisons being made between recent and old-fashioned weapons. Captain Blunt of the ordnance department traced the gradual decrease in the weight of the bullet, the size of the charge, and the diameter of the calibre, arguing that the magazine gun gives to the soldier a reserved power while in action, and thus increases his confidence. The new projectile, as discharged from the modern rifle with a velocity of 2,000 feet a second, would penetrate the earth to a depth of 25 inches; would pass through pine wood 30 inches, and would kill or wound four men standing in file. Surgeon La Garde illustrated his remarks with anatomical specimens, showing that the old style of leaden bullet shattered all portions of the bone, while the modern steel missile penetrated without fracturing. Hence the use of the new rifle and bullet was not only more effective but more humane.



LOOKING NORTH FROM ADMINISTRATION BUILDING



THE SHEPHERD BOY

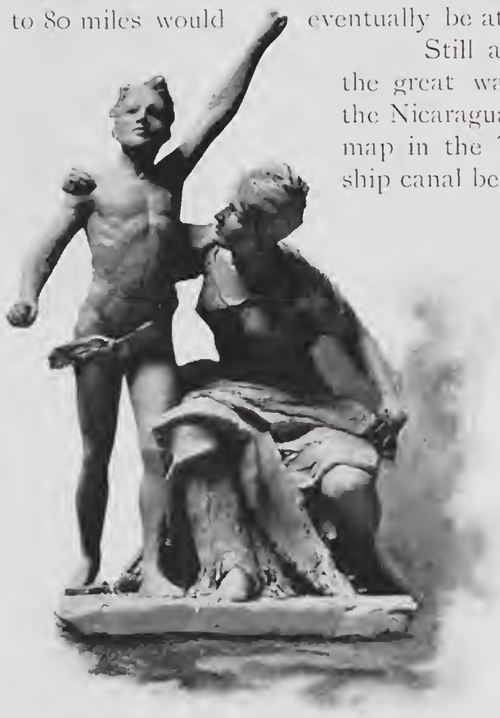
By Thorwaldsen

The sessions on engineering as a branch of education, with I. O. Baker as chairman, were attended by students and professors from prominent institutions in Europe and the United States. John Goodman of the Yorkshire college, England, Charles D. Jameson of the university of Iowa, and others spoke on the subject of laboratories and the researches conducted by students. Field equipment and practice, methods of training, and similar topics were also treated in this connection.



GROUP FOR ELECTRICITY BUILDING

In addition to the sessions already mentioned, a conference was held on the subject of aërial navigation, O. Chanute, Doctor Thurston, and Colonel King presiding at the several meetings. Papers were read and the views of distinguished scientists considered, general principles being mainly discussed and special devices of no practical value excluded from consideration. It was shown that aërial navigation could now be classed among the sciences, and that such was the progress within recent years that most of the problems connected therewith would appear to be on the point of solution. Since the last international conference, held in Paris in 1889, a measurable success has been achieved in driving balloons at the rate of 25 miles an hour; but at such cost and with loads so light as to limit their use to war purposes. It was believed, however, that a speed of 60 to 80 miles would eventually be attained with flying machines propelled, like birds, by self-developed energy.



GROUP FOR ADMINISTRATION BUILDING

Still another congress was that which was held for suggesting improvements in the great waterways of the world. A prominent engineer explained the project for the Nicaragua canal, describing the route from ocean to ocean as indicated in the relief map in the Transportation building. The principal topic, however, was the proposed ship canal between Lake Michigan and the Mississippi river, connecting the commerce of the Gulf of Mexico with that of the great lakes and internal waterways. The route by way of the head of Lake Superior was considered by the secretary of the Duluth board of trade, and that by way of Chicago and the Illinois river by L. E. Cooley, a Chicago engineer. Perhaps the most forcible presentation of the matter was by an Iowa delegate who said in part: "The building of this waterway means higher prices for grain and produce to the farmer by making freight cheaper. This canal will carry wheat from the Mississippi river to Chicago for two cents per bushel, saving four cents per bushel. Suppose it carries 400,000,000 bushels of grain, or one third of the crop of 1,200,000,000 bushels produced in the six states of Iowa, Illinois, Minnesota, Wisconsin, Kansas, and Nebraska, the farmers will be benefited by this route to the extent of $16,000,000 on this item alone, and on the 800,000 tons of anthracite coal used in this valley will at least be saved $2 per ton on the through route from Buffalo, which would amount to $1,600,000 more."



GROUP FOR ADMINISTRATION BUILDING

At the closing session all the members of the various divisions met together, and the chairman of each reported briefly the proceedings in his section. Earnest and telling farewell speeches were delivered by many of the leading foreign delegates, and when the meeting separated, it was felt that at these congresses the work accomplished tended to the advancement of all branches of engineering science.

At the opening session of the congresses of art and architecture, with Charles L. Hutchinson as chairman of the former, Walter C. Larned delivered an address on the relation of literature to art, and among other papers were those on American painting and sculpture by W. M. R.



W. M. R. FRENCH

French, and on Polish art by Michel de Zmigrodski. The congress of photography held several sessions, as also did the congress of ceramic art, women being largely represented in the sessions of the latter and reading essays in each of the several departments.

The congress of architecture dealt largely with the architectural, landscape, and other constructive features of the Fair, among the speakers being D. H. Burnham, F. L. Olmsted, E. C. Shankland, W. H. Holcomb, C. F. Foster, and R. H. Pierce; but of these matters sufficient mention has already been made. An interesting paper by Henry Van Brunt, the artificer of the Electricity building, touched on the growth of characteristic architectural style in the United States. Frederick Baumann chose for his theme "Chicago; a sketch of its rise and development," describing some of the old-time buildings and tracing the development of architectural science since, in 1846, John Van Osdel, the pioneer of his profession, first devoted himself to the making of plans and specifications. The elevators of Chicago were marvels of constructive skill, and as for the raising of buildings and blocks, it would seem that the men of Chicago could raise any structures on earth, unless it might be for the pyramids of Egypt. Other themes discussed were the use of color in architecture by H. L. Warren of Boston; government architecture by Jeremiah O'Rourke, and public competition by J. Gaudet, while as president of the American institute of architects, which held here its annual convention, E. H. Kendall delivered the usual address.

In the congresses at which were discussed the various branches of government, many subjects were treated of vital importance to this over-governed country, where what is needed above all else is to undo the mischievous legislation which impairs the prosperity of state and nation, of community and individual. As proposed by the committee the topics to be considered included law reform, international law, the administration of justice, political and economic reform, the government of cities, executive administration, the protection of property in literature, and arbitration and peace.



F. W. GROGAN

At the sessions devoted to law reform and jurisprudence were discussed the development of constitutional law in the United States; claims against governments; the administration of civil justice in Russia and in Japan; the criminal law of Italy; legal education, and admission to the bar. Judge Gary chose for his theme the value of precedents, and Judge Hudson asked and in part answered the question, how could the administration of justice be improved; other speakers on this topic being judges Wakefield, Vance, and Hawkins. Simeon E. Baldwin spoke of the duty of the state in suits attacking charitable bequests, and J. B. Haskell of the conflict of state and federal court decisions. These, however, are but specimens of the numerous subjects presented for consideration.

The suffrage was fully treated, and especially the question of woman's suffrage, the speakers on the latter subject including, in addition to such prominent advocates as Susan B. Anthony, Isabella B. Hooker, and Laura de Force Gordon, women from many foreign lands, from Iceland to South Australia. Proportional representation was freely discussed and recommended; some of the speakers urging that each political element should be represented in the ratio of numbers. Municipal government was a favorite topic, and at the congresses held thereon some forcible views and statements were presented. David Dudley Field recommended a reduction in the number of municipal officers to be elected by popular suffrage; so that voters would not need to consider the claims of a host of candidates, as to whose fitness or unfitness they could not possibly be informed. Seth Low declared the most deep-seated cause of municipal evils and troubles to be the disposition to use a city for political purposes without consideration for the city itself. Men became partisans before they were citizens, and to secure office, city officials must first be partisans. Charles S. Ashley called attention to the general condition of cities and towns—bad paving, defective sewerage, dirty streets and alleys, inferior gas, mismanagement of schools, and extravagance in all departments. As a remedy he suggested the appointment of committees of property owners to coöperate with officials or agents in making public improvements. Among other speakers were John H. Gray and W. J. Onahan, whose remarks dealt mainly with the municipal affairs of Chicago.



RICHARD M. HUNT

Present at the international congress of arbitration and peace were prominent advocates of the cause from many cities and nations. From Washington came Josiah Quincy, assistant secretary of state; from Boston, Hezekiah Butterworth and Robert T. Paine; from Philadelphia, Alfred H. Love; from London, W. Evans Darby; from Germany, Adolph Richter; from Italy, V. Zeggio and Hector Pratuzi; while Denmark, Turkey, Africa, and other lands had also their representatives. As president of the congress, Josiah Quincy read an exhaustive paper on the financial aspect of the question, and on the benefits of arbitration in the settlement of international disputes. In the United States there was one soldier to every 2,640 citizens; while in France the proportion was one in 68, and in Germany one in 90. Within the last quarter of a century the United States had several times adjusted by arbitration the differences between other powers; within the last century

this country had in more than thirty instances arranged for the settlement of her own disputes with foreign powers through some form of arbitration. To these must be added the settlement of the Bering sea controversy, the most conspicuous example of all, and one that had greatly strengthened the cause by attracting public attention, by the novelty and importance of the questions involved, and by the tone and character of the proceedings.

Alfred H. Love declared that there could be no enduring peace while nations continued to put their trust in weapons; preaching peace in their churches while organizing armies and navies, and spending their substance on fortifications and battle-ships. The appropriations made for such purposes should be used for hospitals and merchant-men; should form an international relief fund for the aid of mankind, irrespective of nationality, wherever there be loss, distress, and suffering. Thus would be formed the grandest pension fund that the world had ever known. In these remarks is indicated the drift of thought in a general discussion on the fraternal



SOUTH FRONT OF ELECTRICITY BUILDING

union of peoples. By George D. Boardman was read a paper on the proper relation of nationality to internationalism, and by Hodgson Pratt was prepared one on international animosities and how they may be removed. John W. Hoyt delivered a vigorous address; Henry S. Clubb spoke on prophecies of peace and war, and Philip S. Moxom on the moral and social aspects of warfare, which he denounced as murder, robbery, and arson on a gigantic scale.

Next in the series of congresses were such as could not properly be classed in any of the principal departments, or for special reasons could not be held at the appointed time and place. Among them were the dental, pharmaceutical, and horticultural congresses, and that which dealt with the African people and continent. The sessions of the last named were of unusual interest, its deliberations including scientific, literary, social, industrial, and commercial questions, discussed by many speakers and in many phases. The Belgian minister delivered the opening address, showing how in the young state of Congo liberty and civilization had supplanted slavery and barbarism; how traffic in arms and rum had been suppressed, and how Arab slave-dealers were held aloof by a chain of defensive outposts. One of the best speeches was from Prince Massaquoi, a native of Africa and a graduate of an American college. From Eli Sowerbutt, a member of the Manchester Geographical society, was read a paper on Africa as a whole, with colored maps displaying the inhabited



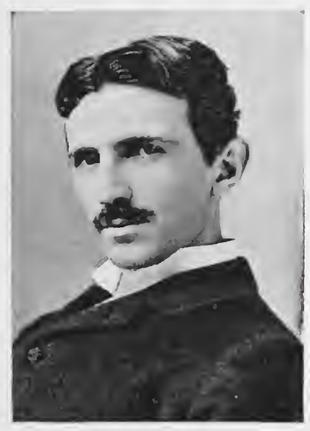
THE DIANA CLOCK

portions and the several conditions prevailing therein. Frederick S. Arnot explained what the Africans themselves have done to develop Africa, and C. C. Adams spoke of that country as a new factor in civilization, touching on its resources, climatic conditions, and railroad development. Others dealt with the African negro as a manufacturer, tradesman, craftsman, and his Americanized brother as a mechanic, artist, musician, journalist, and professional man, still others telling what the American negro owed to his kindred beyond the sea. Should the Afro-American colonize Africa, was among the topics considered, one of the speakers suggesting the formation of a chartered company, like that under which Virginia was colonized; but to this the sentiment of the congress was strongly opposed; for, as was stated, civilized negroes of the better class were needed where they were, to counteract the effect of poverty and illiteracy among others of their race.



ELISHA GRAY

The action of European powers in relation to the slave trade was freely discussed, and especially the effect of the Brussels treaty of 1891, reports being received from the British anti-slavery society, embodying the most recent and reliable information touching on many of the subjects under consideration by the congress. One of the first addresses delivered was on the condition of the negro from 1493 to 1893, and by others were treated from historical, philosophical, and ethnological points of view, the African civilizations of the past and present, with special regard to that of Egypt. In addition to the slave trade were also considered the efforts to suppress it, and the means for affording the colored races opportunities for self-improvement and self-advancement. In this connection one of the most telling speeches was delivered by Bishop Arnett, before a large and deeply interested audience assembled in Columbus hall.



NIKOLA TESLA

In the department of science and philosophy were included nearly all the branches that could properly be classed under those divisions, the sessions lasting throughout the week beginning with the 21st of August, though for reasons that need not be stated, some were held earlier or later during the season of the Fair. At the formal opening, among those who accompanied president Bonney to the platform was Baron von Helmholtz, whose appearance was greeted with an outburst of applause such as never before was heard within the walls of the Chicago Art institute. There were the usual addresses from the chairmen of the several congresses, among them one from Elisha Gray, who presided over the electrical congress, and for many years has been striving to bring about an international agreement as to electrical units and standards of measurement. To this end eminent men were appointed as delegates by the governments of Europe and the United States, to continue the work already accomplished, the Austrian delegation being headed by Nikola Tesla, who as an electrician ranks second only to Edison, while Canada, Mexico, and China were also represented. Thus the decisions reached and embodied in the report adopted at the close of the congress were in the nature of a recommendation to the participating powers, and in the light of present knowledge may almost be considered as final.

First among the papers read may be mentioned that of Nikola Tesla, who selected as his theme mechanical and electrical oscillators, handling the subject with his usual skill and illustrating it by a number of startling experiments. W. H. Preece, an English inventor and author of note, considered the problem of electrical communication through space. After referring to Edison's experiments, showing that telegraphic communication could be transmitted to or from a moving train, he stated the results of his own researches as to the laws and conditions that determine the limits of distance between transmitting and receiving agencies. Silvanus P. Thompson, one of the most popular writers on this branch of science, suggested the means for establishing ocean telephony, claiming that long-distance telephoning, to the point of freely conversing across the Atlantic, was but a question of time. By George Forbes was explained the work now in progress for utilizing the Niagara falls in the generation and transmission of electricity, the aim being to supply power for factories within a radius of 200 or 300 miles, and perhaps for propelling boats on the Erie and other canals.



GENERAL GREELEY



A. G. BELL

Before the congress of chemists many interesting papers were read; among them that of John W. Langley on the works and aims of the committee on international standards as to the composition of steel. H. D. Richmond spoke of the analysis of dairy products; Ernest Millau of the best methods of oil analysis, and at other sessions agricultural chemistry was thoroughly discussed, especially in relation to soils and the analysis of fertilizers.

Not a few of the speakers were from Europe and Australasia, a Russian professor from the Polytechnic school of Riga presiding at one of the sessions. In connection with the chemical division was held the congress of pharmacists, at which the education and examination of students in schools of pharmacy were the principal subjects of discussion. At a special session held by women, the chairman, Mrs Ida Hall Robey, stated that there were more than 700 registered pharmacists of the female sex in the United States. In the geological division women also met in separate convention, among the subjects treated being the granites of New England and the fossils of the upper Silurian group. By James Geike, of the Scotch geological survey, a valuable paper was prepared on the glacial succession of the British isles and northern Europe. Glacial succession in Sweden, in Switzerland, and in the United States were also treated by eminent geologists, and other questions considered were pleistocene climatic changes and the correlation of glacial formations in opposite hemispheres.

Meteorological topics were discussed by delegates from many states, and especially by the chiefs of weather bureaus, the principal subjects considered being the proper location, elevation, and shelter of instruments. In an interesting paper Frank H. Bigelow discoursed on the possibility of long distance forecasts, stating that after a thorough investigation he had obtained results which clearly indicated that the magnetic influence of the sun upon the earth is attended with well defined effects on its atmosphere. John Eliot of Calcutta took for his subject the prediction of dry and rainy seasons, and Father Faura, director of the observatory at Manila, the signs which precede typhoons in the Philippine islands.



WATER, SCIENCE, AND FIRE

In the astronomical department Alvan G. Clark, by whom were fashioned the lenses for the Lick and Yerkes equatorials, spoke of the future mechanism of telescopes, claiming that the limit of size and power was yet far from being attained. T. J. J. See touched on the investigation of double-star orbits. In a darkened room George E. Hale described and illustrated with stereopticon views the process of taking photographs of the sun, and by J. Keeler were traced the wave lengths of the principal lines in the spectrum of the nebulæ.

At another session Egon von Oppelzer read a paper on contributions to solar physics, and W. H. Pickering attacked the theory that the moon was a dead planet, asserting that there were evidences of the existence of water and atmosphere. In this connection may also be mentioned the mathematical section for the discussion of mathematics in relation to astronomy.

At the philosophical congress, held in connection with those which dealt with physics, R. N. Foster, chairman of committee, remarked that philosophy, as compared with the solid work of science, was like a comet sailing among the stars, very large of head and seemingly dangerous, but after all nothing more than vapor. Nevertheless philosophy was the mother of all the sciences, taking up their many threads and presenting them in their essential unity. Moreover it pervaded the entire domain of education; and education, not money, was what made the man. A paper on the Hegelian system of dealing with criminals called forth much discussion, one of the speakers touching on the methods advocated by Herbert Spencer and Leslie Stephen, who were in favor of reformatory rather than vindictive punishment. Among other subjects considered were the ethical aspects of pessimism; the twofold nature of knowledge, imitative and reflective; the philosophy of education, and synthetic education, Josiah Royce of Harvard university reading the final paper on Kant and causation, prepared by W. T. Harris of Washington.

In the congress of psychology were treated mesmerism, hypnotism, clairvoyance, and kindred topics, Elliott Coues, as chairman, reviewing in his inaugural address the entire field of psychological science, past, present, and future. "While not as yet what may be termed an orthodox science," he said, "the facts on which it is based have always existed, and this is the first time that it has received official recognition from government." Many who have long been students of the strange phenomena connected therewith read papers tending to correct the crude ideas commonly entertained on this subject. A few days later were held the congresses on anthropology, ethnology, and zoölogy, W. F. Putnam, as chief of the Anthropological department of the Fair, taking a prominent part in the proceedings.

Labor was the next subject for consideration; not the labor question as it is commonly understood, but labor in its highest and broadest sense, as discussed, though with much diversity of view, by its sincerest friends and champions in the United States and in many foreign lands. From England especially came many leaders of the cause, and among those who coöperated with the committee, personally or as corresponding members, were William E. Gladstone, Sir John Gorst, home secretary for India, Richard T. Ely, and Carroll D. Wright

Cardinal Manning accepted an honorary membership, and said Cardinal Gibbons: "I regard the congresses as the most important feature of the Exposition, and the labor congress as the most important of the congresses."

In his opening address C. C. Bonney spoke of the problems which the labor movement presented. Others followed in similar vein, among them Bishop Fallows, who touched on the attitude of the church as a friend to the laboring man. By Herbert Barrows was presented a message of greeting and sympathy from the workingmen of England, supplemented by a few remarks of his own. Kate Field was in favor of a department of labor in the cabinet, and of a practical labor bureau, with affiliated societies in every section of the United States. In a paper prepared by Lady Dilke was told a pitiful story of the hardships of British workwomen, of those who toiled in the foul atmosphere of sweat-shops and factories for less than would furnish the scantiest of daily bread; makers of match-boxes, for instance, receiving but seven shillings for 84 hours of labor. Among the speakers at the opening session were John H. Gray of the Northwestern university; William Clarke, secretary of the British advisory council; Doctor Zacher of Berlin, and Victor Delahaye of the superior council of labor of France.



EDWARD EVERETT HALE

At another session Samuel Gompers, in answer to the self-proposed question, "What does labor want?" said that it wanted the earth and the fulness thereof; and first of all an immediate advance in wages and reduction in time—eight hours a day, with fewer to-morrow and fewer still the next day. But while there was other nonsense of this kind, the discussions of the labor parliament were for the most part of a rational and instructive character, as at times were even the remarks of Samuel Gompers. Edward McGlynn discoursed on the destiny of the labor movement, advocating the single tax doctrine as one that would improve the laborer's condition. On the latter question spoke also Henry George, who explained the meaning of the phrase and how the idea was suggested to him by the so-called land boom in California, which carried the price of what before were almost worthless tracts to $1,000 an acre. General Weaver, Mary E. Lease, and others stated their views in this connection, and a single tax platform was adopted, the final clause in which, recommending public control of common ways, as for transportation and the furnishing of gas and water, was amended on the motion of Hamlin Garland.

From Edward Everett Hale was read an essay on the results of coöperation and the sharing of profits as exemplified by the Nelson Manufacturing company of St Louis, and by N. O. Nelson, vice-president of that company, were further explained its workings. The latter was one of the best papers read, full of sound, common-sense, practical suggestions, and without trace of communism, anarchy, or socialistic drivel. Said Nicholas P. Gilman, who followed, "To give a workman equal opportunity with his employer is the philosophy of the whole labor question, and an example like this is worth all the rhetoric in the world." The education of the workman and especially his industrial training, was considered, as also was the question of weights, measures, and coinage, one of the speakers advocating international mints and an international system of weights and measures. At a separate session of women Lucy Salmon of Vassar college discoursed on economic questions in domestic service, and Mrs Helen Campbell on the industrial condition of women and children. A sensible paper was the one read by Catherine Coman of Wellesley college, showing that not only were women's wages steadily advancing, but during the present century the occupations open to women had increased a hundred fold.

The labor congresses closed on labor day, the 4th of September, on the Sabbath preceding which, clergymen representing several denominations met in Washington hall before an audience of 2,500 persons, assembled to hear from the churches their messages of hope and cheer. After a brief address from Henry D. Lloyd, who acted as chairman, Archbishop Ireland spoke on the catholic church and the labor question, touching at length on the encyclical relating to the condition of labor from Leo XIII. Speaking for the protestant denominations, John P. Coyle stated that the church owed a duty to labor, and if that duty were done the labor problem would not exist. Representing the Hebrew faith, Emil G. Hirsch remarked that there was no Jewish pulpit but felt the thrill of the prophet's words, that he who planted the vine should eat of the fruits thereof. The age to preach the resignation of the weak was past. The law was often made a fetich, and charity a makeshift. Had we more justice, we should not need charity. In a paper written by George E. M. McNeill was recommended an increased tax on land to give work to the unemployed, and Herbert Burrows outlined the attitude of socialism toward labor and the church.



THE BLACKSMITH

Of all the sessions held in the Art institute none attracted more attention than those of the so-called parliament of religions, preceded by the catholic congress and followed by denominational and missionary congresses, with those of the evangelical alliance and other associations and brotherhoods.



CARDINAL GIBBONS

Here were represented all christian sects and creeds, the Hebrews also participating, while from Hindostan and China came men who explained how much there was in common between the doctrines of Christianity and those of Brahminism, Buddhism, and Confucianism. Points of agreement and divergence in belief were discussed, with the achievements of churches and missions in the common cause of humanity, these gatherings receiving the endorsement of the religious leaders of the world, not a few of whom were present in person.



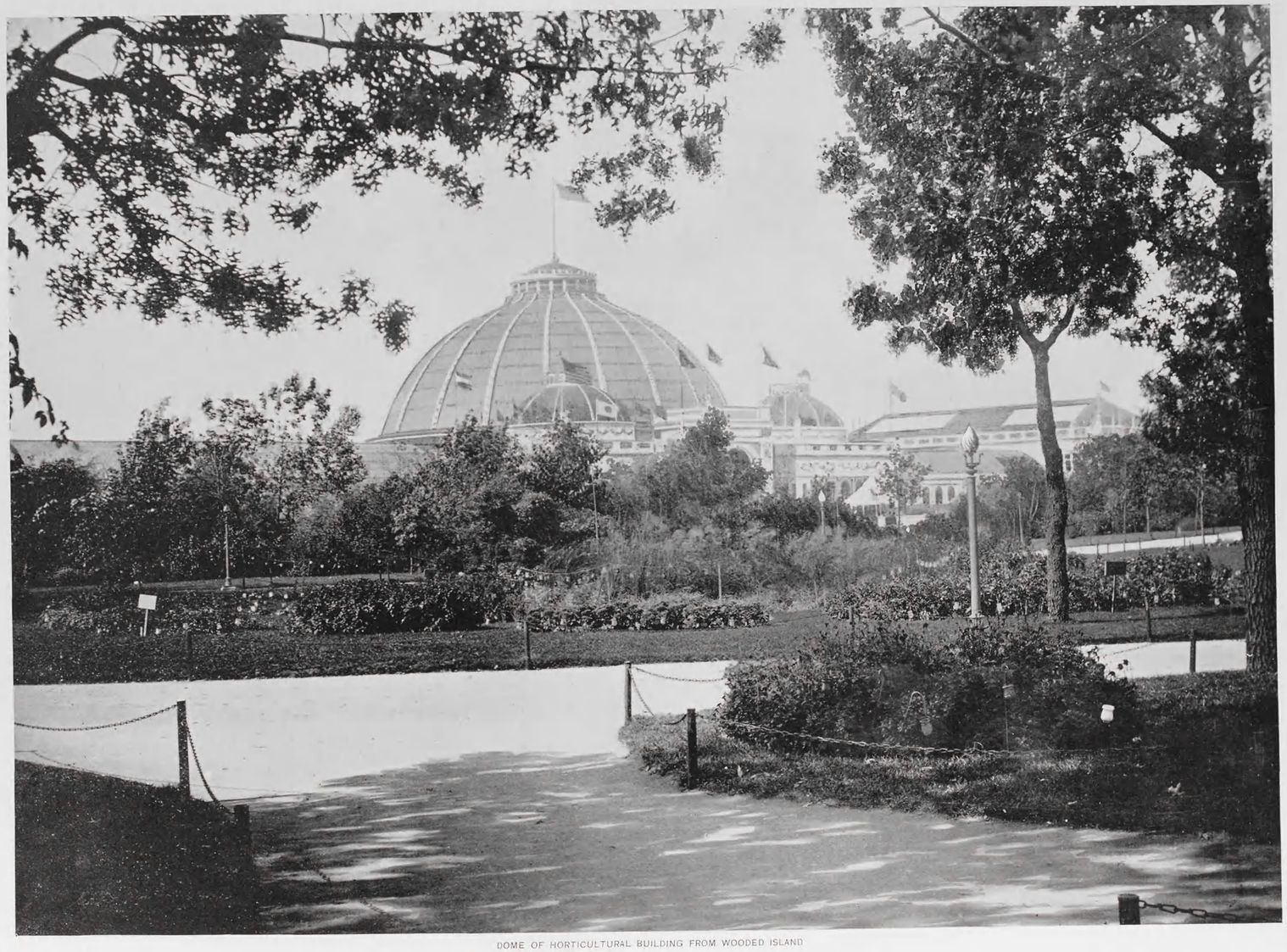
BISHOP SPALDING

On the morning of the 4th of September the hall of Columbus was crowded as never before it had been; for this was the day appointed for the opening of the catholic congress. The hall was tastefully decorated, a fringe of plants encircling the carpeted platform, with a large bouquet of roses on the desk, and in the background festoons of white and yellow bunting. On the right was a bust of Cardinal Manning; on the left one of Cardinal Newman, and smiling as in benediction on the audience, the portrait of Leo XIII, beneath it those of Washington and Columbus, below which was the papal banner. At the head of the procession was escorted to the platform a gray-haired man, benign of aspect and attired in robes of scarlet. It was Cardinal Gibbons of Baltimore, to whom was accorded the place of honor. Next to him were archbishops Feehan, Ryan, Ireland, Hennessey, Jannsens, and other dignitaries of the church, with a number of priests and laymen. By Archbishop Ireland were briefly outlined the purposes of the congress; Cardinal Gibbons urged that all discussions be conducted in a spirit of mutual forbearance, and Archbishop Redwood of New Zealand said that he had travelled 9,000 miles to go to school again at the greatest school on earth—the congresses of the Auxiliary. By William J. Onahan, secretary of the committee on organization, was read a letter of greeting and approval from the pope and by Father Nugent a similar epistle from Archbishop Vaughan, successor to Cardinal Manning. Monseigneur Satolli delivered an eloquent address in Latin, and after further speeches the first regular session was convened.

To relate in detail the proceedings of the catholic or other religious congresses is foreign to the purpose of my work, not only on account of their length, but because in these pages is no place for theologic or polemical discussion. Moreover, to the members of each denomination its tenets are already known, and here to repeat



NORTHWEST ELEVATION MANUFACTURES BUILDING



DOME OF HORTICULTURAL BUILDING FROM WOODED ISLAND

them would be a tiresome iteration. Suffice it to mention in briefest outline the more salient features, not omitting the views expressed by those to whose creeds the Christian world is a stranger.

Passing then to the parliament of religions, it may first of all be stated that while doubtless the only one at which all the great historic faiths were represented, there is nothing new in its plan; for the project for a congress of representatives of religious faiths is older than Christianity itself. Says John H. Barrows, chairman of the committee, "H. Dharmapala of Calcutta, who was to speak for the Buddhist church of Ceylon, thus wrote as to the religious parliament: 'Two thousand years ago, just such a congress was held in India by the great Buddhist emperor, Asoka, at the modern city of Patua, and the noblest lessons of tolerance therein enunciated were embodied in lithic records and implanted in the four corners of his empire. Here is one extract: King Plyadasi honors all forms of religious faith, and enjoins not only reverence for one's own faith, but no reviling or injury to that of others. Let the reverence be shown in such manner as is suited to the difference in belief.'"



JOHN H. BARROWS

The idea of a congress of religions, or what has been termed a sympathy of religions, has been many a time suggested both in poetry and prose, from the days of Cominius to those of Tennyson, who quotes the following inscription for a temple in Kashmir: "O God, in every temple I see people that see thee, and in every language I hear spoken, people praise thee." And thus in his *Akbar's Dream*, one of the most recent of his poems.



ARCHBISHOP DIONYSIOS LATAS

I dreamed
That stone by stone I reared a sacred fane,
A temple, neither pagod, mosque, nor church,
But loftier, simpler, always open-doored
To every breath from heaven; and Truth and Peace
And Love and Justice came and dwelt therein.

By some of the foremost thinkers of the world, both among clergy and laity, the project was strongly commended, and if here and there it was condemned, this was only among the prejudiced and narrow-minded. "Religion cannot be exhibited," wrote an English clergyman. "But surely," as Doctor Barrows remarks, "its great part in human history can be impressively told; its achievements can be narrated; its vast influence over art, ethics, education, liberty can be set forth; its present condition can be indicated; its missionary activities can be described, and best of all the spirit of mutual love, of cosmopolitan fraternity can be disclosed and augmented." By the various denominations, about thirty in number, were expounded what they deemed to be the special truths committed to them, the practical results accomplished, and especially such as shed lustre on their annals.



JOSEPH COOK

It was an impressive spectacle that marked the opening of the parliaments in Columbus hall, on the 11th of September, and never before perhaps was seen at one time and place such diversity of feature and costume. Men from almost every state and European nation were here; here were Hindoos in their gaudy robes; Japanese in their picturesque garb, and Chinamen in mandarins' attire. When the procession approached the platform, headed by C. C. Bonney and Cardinal Gibbons, there was neither vacant seat nor standing room on floor or gallery. Then came a long array of bishops and archbishops, of priests and princes, of men and women of every race and color, such as Addision might have dreamed of in his vision of Mirza. After prayer and hymn, President Bonney briefly outlined the programme, and was followed by Doctor Barrows with an address of welcome. Then spoke Archbishop Feehan, Cardinal Gibbons, Augusta Chapin, Harlow N. Higinbotham, Alexander McKenzie, Archbishop Dionysios Latas, head of the Greek church, P. C. Mozoomdar on behalf of the Brahminists, and Pung Kuang Yu for the followers of Confucius.



THOMAS W. HIGGINSON

Among the speakers at other sessions were Lyman Abbott, whose subject was "religion essentially characteristic of humanity;" E. L. Rexford, whose theme was "the religious intent;" Edward Everett Hale, who was received with much enthusiasm, and Joseph Cook, who declared that he had no sympathy with the milk and water, lavender styles of modern religion. Rabbi Mendes spoke in relation to the Hebrew faith; H. Toki explained the tenets of Buddhism; Kinza Riuge M. Hirai those of the Japanese.

and Shibata Reüchi those of the Jikko sect of the ancient Shinto faith. Shibata, attired in robes of white and yellow silk, created somewhat of a sensation by kissing on the cheek several motherly dames who wished to shake hands with and congratulate him, but this was merely the Jikko method of salutation and was so accepted.

By Archbishop Kane was read a paper from Cardinal Gibbons on the needs of humanity supplied by the catholic religion. Mrs Eliza Sunderland spoke of comparative religions, and from T. B. Thiele of Leyden university came a treatise on comparative theology. Thomas W. Higginson, in an essay on the sympathy of the religions, stated that the first religious parliament in the United States was simultaneous with the nation's birth; George Washburn, president of a college at Constantinople, presented an exhaustive treatise on the points of contact and contrast between Christianity and Mohammedanism, and Mrs Ormiston-Chant spoke in favor of a new religion. From Kung Ho of Shanghai was read his prize essay on Confucianism, and from Monseigneur D'Harlez of Louvain university, a paper on the comparative studies of the world's religions. Royalty was also represented at the parliament, Prince Wolkonsky of Russia discoursing on the social aspects of religion, and Prince Chudhadharn on Buddhism as it exists in Siam. From Lady Henry Somerset came a gracious message, and from such eminent men as Max Müller and Thomas Dwight, papers filled with the ripest fruits of scholarships. A Hindoo monk complained of the patronizing fashion in which he and his fellow orientals had been treated by some of the speakers. "We have been told to accept Christianity," he said, "because Christian nations are prosperous. We look at England, the richest Christian nation of the world. Why is she rich and prosperous? Because she has her foot upon the neck of 250,000,000 Asiatics. We read history and we see everywhere that Christianity has conquered prosperity by cutting the throats of its followers. At such a price the Hindoo will have none of it."



ANNIE BESANT

The science of religions was also discussed, and especially that of theosophy, among the speakers being Annie Besant, who discoursed on Karmic law; G. W. Chakravati, who showed what theosophy was; H. Dharmapala, who pronounced it the basis of all religions; Henrietta Muller, who stated that it revealed the essential humanity of the deity and the ultimate divinity of man; William Q. Judge and Mrs Cooper-Oakley, who explained the theosophic ideas of brotherhood and of death. At the congress of Christian scientists the first paper was read by E. J. Foster-Eddy, its president. In an address on scientific theology, John F. Linscott declared that Christianity as a Christian science was not a religious system but a universal religion, with a universal principle, and capable of universal practice. Other addresses were on the resurrection, on spirit and matter, on God incorporeal, mortals and immortals, prophetic scriptures, healing the sick, the scientific universe, and the brotherhood of man.



BISHOP SAMUEL FALLOWS

Thus the parliament of religions was continued until near the close of the month, some of the speakers mentioned and many others delivering addresses at several sessions. With them and after them were held the meetings of the several religious denominations, whose proceedings cannot here be described in detail. It may be stated in general terms that at the parliament and congresses were discussed the theistic teachings of the great historic faiths, the nature and life of man, his place in the unverse, his spirituality, immortality, and his relations and duties to God. Religion was considered apart from morality, as were the various systems of religion, past and present, their defects, and what they have done for mankind, together with religion in the family, in relation to the marriage bond, to home and education, to society and social problems, to science, art, and letters. The fraternity of peoples, the condition and reunion of Christendom and of the whole human family, with the characteristics of the coming faith which should unite mankind in bonds of religious unity, were also among the subjects treated, the parliament closing with expressions of peace and good will in which all the participating sects and nations were represented.



MONSEIGNEUR SATOLLI

At the mission congresses the speeches covered a large variety of topics, among those which attracted most attention being the address of Frank M. Bristol, who took for his subject the unevangelized in Christian lands, attacking the churches in vigorous style for expending their yearly millions in sending missionaries to foreign lands, while near almost every church in Christendom were as dark spots as existed anywhere on earth. Other addresses were on problems and methods, Sunday schools as coöperative agencies, bible societies, tract and book societies, denominational comity and coöperation, and a wide range of subjects touching on missions and their work, George Smith of Edinburgh, in his "geographical survey, especially the totally unreached fields," outlining the condition of foreign lands, and presenting statistics as to the great mission fields of the east. Women held separate conference under the auspices of the International society of woman's missions, and later, joint session with the mission congresses.

At the congress on Sunday rest, which followed, Rabbi Felsenthal made some most sensible remarks in connection with the Sabbath in Judaism, denouncing all legislation which would enjoin on unwilling minorities one certain day for keeping the Sabbath and one certain manner of keeping it. Delegates from several foreign lands were present, and the papers read were numerous, ranging from Sunday closing at the Fair to Sunday rest from the work of railroad transportation.

During the first week of October was held a congress on patents, trade-marks, and inventions, these being classed under the division of intellectual property and thus belonging to the department of government. Many were the papers read by men and women of whom not a few were specially qualified to deal with the subjects under debate. Of unusual interest was the address of Judge Henry W. Blodgett, whose recollections dated back to 1831, when among the problems of the day was how to gather and garner the harvest of the prairies. First was invented a plough that would "scour," and then a more serviceable kind of harrow. The cradle supplanted the sickle and the harvester followed, as did the thrashing machine and the fanning mill. Next came the combination machine which cleaned the grain and placed it in bags, these and other inventions attracting westward an intelligent class of settlers, to whom the use of superior farming implements afforded time and means for self-improvement and self-advancement.



JOHN W. NOBLE

R. J. Gatling, inventor of the gun which bears his name, welcomed the delegates on behalf of the American association of inventors, of which he was president. The greatest monument that the country possessed he pronounced to be the patent office, from which the first year three patents were issued, and in the year 1892 more than 36,000. To Americans were granted twice as many patents as to all the remainder of the world, and some of them were of incalculable benefit. By Mrs Charles Henrotin was read a paper prepared by Helen Blackburn of London on the inventions of women. The first patent issued to a woman was in 1637, for preparing tinctures, as of saffron and roses, and the second in the following year, for an implement for cutting wood into thin pieces, to be made into band-boxes and sword sheaths. Thenceforth until the end of the eighteenth century the names of only 15 women are found in the records of the British office, with about 40 for the first half of the nineteenth, and nearly 1,800 between 1852 and 1884, since which latter date there has been a steady increase, year by year, in keeping with the growth of education, wealth, and luxury.

John W. Noble, ex-secretary of the interior, spoke of the interdependence of patents and their relation to the government. Largely through the inventions of the era of civil strife the republic was enabled to sustain its armies and prosecute the war; for the productive lands of the west, though depleted of men, were well supplied with agricultural machinery of improved and recent pattern. William F. Draper, chairman of the house committee on patents, discoursed on the influence of inventions on cotton industries, showing how manufactures had been fostered by improvements in machinery for gathering and preparing the crop and shaping it into fabrics. A plan for an international union for the protection of property in patents, prepared by Swiss contributors, provoked considerable discussion, several of the speakers urging the abolition of the section of the revised statutes which limited the term of an American patent to the shortest term of a foreign patent.



WILLIAM F. DRAPER

Agriculture was the next topic presented for consideration, and in this group were included not only farming and stock-raising, but farm life, training, and experiment, the construction and care of roads, the veterinary art, and among other subjects, ornithology in its relation to insect pests. To Samuel W. Allerton, who, with Edwin Walker, constituted the first congressional committee to secure the location of the Fair, was intrusted the general direction of the congresses, and present on the platform at the opening session were several chiefs of departments, with many distinguished visitors from foreign lands. By C. C. Bonney were briefly stated the main objects of the agricultural congresses; Allerton declared the condition of the farmer in every way preferable to that of the industrial classes in the city; Lady Somerset related briefly her experience as an English landowner, giving way to Joanne Sorabji of Hindostan, who spoke of the magnificent specimens of physical womanhood in the agricultural districts of India, while Countess di Brazza of Italy described the women of her own sunny land.



J. STERLING MORTON

W. J. Buchanan, chief of the Agricultural department, declared that he would not exchange the out-door education he had received in the country for all the college lore that could be placed before him. But the speech which attracted most attention was that of J. Sterling Morton, secretary of the national department of agriculture, who inveighed against granges and other agricultural organizations, which, as he said, "for political purposes farmed the farmer." The gauge of battle thus thrown down was taken up on the succeeding day by Colonel J. B. Brigham of Ohio, who thus

took exception to the secretary's remarks. "Every advance, every new invention of farm machinery, every experiment which has been helpful to the farmer, has been promoted by the grange, and if it were not for the grange and the alliance, our country would have no secretary of agriculture." Continuing, he asserted that it would be better for congress to have more of the agricultural element in the halls of legislature, and that when the great struggle came between political corruption and political integrity, the country would turn for salvation to the men of the farm. Agricultural interests in the south were discussed by a Louisiana woman, who spoke of the close attention to drainage, fertilization, and suitable machinery, as applied to the production of sugar, claiming that in no industry common to the United States was cultivation more thorough than on a sugar plantation. Other speakers dealt with the educational and social features of farm organization, and with what Connecticut had done for agriculture, especially in the raising of choice live-stock and the establishment of state experimental stations.



CONGRESS OF VEGETARIANS

In the congress on agricultural training and experiment, the directors of the stations scattered through the states, forming the membership of the national association, discussed the work of their institutions and their plans for the future. The road congress was of special interest to the farming community. It was held by the chairman, Theodore Butterworth, that while the United States led the world in its railways, it was behind European countries in highway roads. A. A. Pope of Boston took an active part in the proceedings, as from the commencement he has in the agitation over defective roads, so detrimental to the well-being of American agriculturists. Various plans were suggested for the construction and drainage of highways, with systems of coöperation between farmers and residents of villages, or of county and state taxation. The general consensus of opinion, however, seemed to favor special legislation by the states.

By chief Buchanan was prepared the programme which, during July and August, was carried out in the assembly hall adjoining the Agricultural building. Here subjects were discussed relating to all the divisions of his department; horticulture, agriculture proper, live-stock, and forestry, the lectures on forestry alone covering a period of ten days. Such topics were considered as the scientific care of forests, the latest methods of tree planting, the effects upon climate of tree culture and of the denudation of woodlands, with the best means of destroying insects harmful to the crops. There was also contributed by delegates a great variety of information concerning the forests and timber trees of Europe, Asia, Africa, and America. Among those who participated were B. E. Fernow, chief of the government forestry division; A. S. Hardy, Canadian commissioner of crown lands; Robert Hudson of New South Wales; Alfred B. King, commissioner for Siberia; J. J. Grinlinton, commissioner for Ceylon; C. B. Waldron of the state agricultural college at Fargo, South Dakota; C. S. Sargent of New York, and M. L. Saley of Chicago, the last named speaker taking as his text "ignorance concerning woods."

J. C. Vaughan was general chairman of the horticultural congress, which dealt with subjects of special and general interest, J. M. Samuels of the horticultural department, and John Thorpe, superintendent of the floricultural bureau, being members of the executive committee. Representatives were present from Germany, France, Holland, Denmark, and other European countries where the raising of fruits and flowers has been made a study, as well as from the eastern, middle, and western states, in which these industries are most developed. The seedsmen and nurserymen occupied separate halls, the papers submitted covering such topics as the care of public grounds, the work of experiment stations, the past, present, and future of floriculture in the United States, and how best to protect the interests of those who first raised distinct species of plants. L. Wittmack of Berlin took for his theme "horticultural displays at future world's fairs," intimating that despite its wonderful landscape effects, the Columbian Exposition was somewhat lacking in floricultural adornment, especially in contributions from foreign lands.



HENRY W. ROGERS

In connection with the agricultural congresses was one on household economics in relation to farm and village communities. This was of course in the hands of women, and of the papers read, especially those on domestic service, some of the most interesting were from foreigners to whom have been accorded exceptional opportunities for studying the problems of domestic life. Frau Morgennstern of Germany, Frau Meyer of Switzerland, and Frau Bundy, president of the Housekeepers' union of Austria were all agreed that in their several countries conditions differed but little from those which here obtain. There was the same difficulty in procuring competent and reliable servants, the same restlessness and instability of character. In Austria, said Frau Bundy, the situation was even worse; for the laws pertaining to domestic service were such as to provoke ceaseless litigation between employers and employed.

Mrs John Wilkinson was chairman of the congress on household economics, and Mrs Laura D. Worley of the one on farm life and mental culture. At the latter most of the addresses were from women; but among the participants were many male representatives from foreign lands. All the speakers dealt with agricultural training in their several countries, some of them also touching on agricultural societies and resources.

Last on the programme was the real estate congress, held under the auspices of the National Real Estate association of the United States, its session beginning a few days before the close of the Fair. In his opening address C. C. Bonney touched on the history of land tenure, which among the Aryan races, even in prehistoric times, was of a threefold nature—first, in common for pasture or public use; second, by allotment for cultivation or business purposes; third, by allotment for homes. Long before history was written, the homestead was held inviolable, and in the doctrine of homestead exemption there was nothing new; for here neither king nor officer might enter unbidden. Homes of moderate value should be free from taxation, and conveyances simple, easily executed, and easily understood; so that property, when not bequeathed by will, would descend to those to whom of right it belonged. Thomas B. Bryan, who was appointed chairman, also urged the simplification of titles, stating that for this purpose were needed not only judicious laws, but permanency and uniformity of legislation.

On behalf of the National Real Estate association, Henry L. Turner welcomed the delegates in apt and complimentary phrase. Suitable responses were made by Albert C. Spam for the eastern states, George A. Armistead for the south, and Thomas Cochran for the west, other speakers being Senator Saunders and Judge Waterman, the latter urging the necessity of providing homes for the working classes. At another session foreign delegates explained the existing usages in their several countries, and one of the subjects discussed was "how and to what extent we can attain national and international uniformity in realty laws." The Torrens system, as it obtains in Australia, with objections to its adoption by the United States, was also considered, and an interesting paper was read on "real estate as the ideal asset."

In conclusion it may be said as to the congresses, that while at times their discussions may have been prolix and tiresome, while there was perhaps too much dissertation "de omnibus rebus et quibusdam aliis," many new ideas were evolved, many old ones were presented in better shape, and many a plan was formulated which shall bear fruit long after the material exhibits of the Fair have been scattered among the nations of the earth. To supplement this material display, by adding to the choicest specimens of human achievement the latest developments in human thought, was the purpose of the Auxiliary, and without it the Columbian Exposition would have been incomplete. Here was the soul of the Exposition, just as in the temples of Jackson park was its body; the one shall perish, but the other shall live again in the lives of millions yet to be.



FLOWER GIRL

World's Fair Miscellany.—Early in June the vegetarians held an international conference, beginning with a reception to visiting delegates, after which were lectures and addresses by prominent members of the cult from Europe and the United States. The main purpose was to promote the interests of the Vegetarian Federal union, and to discourage the eating of flesh, though aiding incidentally all temperance movements and agencies. It was claimed by vegetarians that most people were prejudiced against their tenets, and certain it is that what they had to say was worth the hearing; for nearly one half of mankind are vegetarians either through choice or necessity.

At the congress on municipal government Mrs Alice Lincoln read a paper on tenement houses and the people who live in them, with valuable suggestions as to the erection and care of such houses, especially in New York, where 1,250,000 people lived in flats. As an experiment she had purchased, arranged, and fitted up a tenement block in Boston, and had trained the tenants to ways of cleanliness and morality, with most satisfactory results. The poor should be helped, and above all should be taught to help themselves, to which end she offered many practical hints. Mrs Florence Kelley spoke on the relations of the municipality to the sweating system, and Mrs Ralph Trautmann on the sanitary reforms effected by women in New York. At this congress also was considered the subject of commercial arbitration, with other methods of adjusting differences between business men and between employers and employed.

At the humane and waifs' saving congresses, held toward the close of the Fair, with David Swing as chairman of the former and Mrs Perry H. Smith of the latter, several papers were presented by women, among them the countess di Brazza, Mary A. Lovell, and Harriett G. Hosmer.

Among those who took part in the mission congresses was Mary C. Collins, called Winona by the Sioux Indians, among whom she has lived for many years, with Sitting Bull, Rain-in-the-Face, and other chieftains near her home on the prairie. She stated that she had gone back and forth among them by day and night without meeting with a discourteous word or look, claiming for the Sioux a nobility of character which the world does not seem willing to accord.



CHAPTER THE TWENTY-SEVENTH

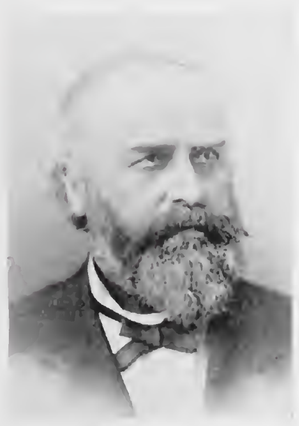
RESULTS, AWARDS, AND INCIDENTS



OF all the pleasant features connected with the Fair, one of the most pleasant was the appreciation, we might almost say the affection with which it was regarded. Of all the lessons it has taught, perhaps the most valuable was that nations, like individuals, should not dwell apart, without interchange of commodities, thoughts, and ideals; nor is there anything that tends more surely to a universal brotherhood of nations than to become acquainted with the best that each has produced. While the greatest international exposition that the world ever witnessed has passed into history, it has bequeathed a heritage for good which cannot readily be estimated, shedding a flood of light on millions of lives and filling the land with the sunshine of beauty and truth. The barriers of isolation, with the ignorance and egotism which it begets, were broken asunder; new thoughts and aspirations stirred unnumbered souls, and men and women were awakened to broader views, to nobler aims than ever before they had known. All too soon the great object lesson was ended, teaching to many nationalities, and especially teaching to Americans, what a people may hope to do and to become; but of such lessons the results are far-reaching, pointing the way to further progress and showing to man, as nothing else could show, what "in part he is and wholly hopes to be."

As the 30th of October drew near, the question was discussed of protracting the season of the Fair beyond the appointed time; for during that month the attendance was by far the largest recorded, amounting to nearly one-half of the total admissions for the previous term. It was at first proposed to preserve intact the buildings, and as far as possible the exhibits, for a second fair to be held in 1894; but to this the park commissioners objected, insisting that the grounds be placed at their disposal on the 1st of January, as in the original agreement. It was finally determined to close on the date selected, but that the Exposition should remain open informally so long as the admission fees continued to swell the revenue. Thus its lustre would be preserved undimmed and its promises fulfilled, with all obligations met.

For Columbus or closing day an elaborate programme had been prepared; but this was the saddest day of all, a day of jubilee turned into mourning; for the mayor of Chicago, Carter H. Harrison, who was held in high esteem and respect by his fellow men, lay stricken dead by the hand of an assassin. The ceremonies were therefore of the simplest, all joyous features being omitted, as the jubilee march, the firing of salutes, and the national melodies of all the nations represented. In Festival hall were gathered some 2,000 persons, among them many of the national commissioners, the directors and officials, and the members of the Board of Lady Managers. First were heard the strains of the funeral march, and after a brief address from Thomas W. Palmer came prayer by John H. Barrows, followed by resolutions of respect. Then the Exposition was declared to be at an end, and after a farewell speech from H. N. Higinbotham the benediction was pronounced, and without demonstrations of any kind the assemblage dispersed, slowly and with the silence of respect.



CARTER H. HARRISON

In considering the material results of the Fair may first be mentioned its attendance, in which, as in other respects, there were many exceptional features. In an early

number of this work it was stated that an average attendance of 150,000 a day, as anticipated by the managers, was by no means an extravagant estimate. The actual returns show a daily average of nearly 154,000. During the 179 days that the gates were open, 27,529,400 persons were admitted, 21,477,212 being paid admissions and 6,052,188 from passes. Thus the total was nearly thrice as large as at the Centennial Exposition, and came singularly close to that at the Paris Exposition of 1889, which remaining open four days longer had somewhat over 28,000,000 visitors. But at first there seemed little prospect that the hopes of the directors would be realized. On opening day, the 1st of May, the admissions were 137,557, but on the following day fell to less than 20,000, and for the first half of the month, with a single exception, never rose to 40,000. The Fair had a deserted appearance; no one was there, or at least not enough to give to it a cheerful and life-like aspect. In the Fisheries building, and one or two others where all the exhibits were in place, there was at times a moderate gathering; but in the great hall of Manufactures, with its 40 acres of floor space, were barely sufficient people to furnish a congregation for a village church. The Fair was not ready, and especially the Manufactures building was not ready; on its ground floor were many vacant sections, and in the galleries there was little to be seen, except bare floors and shelving. Moreover the weather was chill and damp; for winter lingers long on the shores of Michigan, and no vernal airs are those which blow from bleak Canadian plains.



BUREAU OF PUBLIC COMFORT

During the first month and a portion of the second the admissions were almost restricted to the people of Chicago and its neighborhood; but slowly at first, and then more rapidly, the attendance began to increase; for those who came from a distance returned with most favorable reports, and the journals of the civilized world were filled with glowing accounts of the wondrous spectacle. Thus the daily admissions, which up to the first few days of June only thrice exceeded 100,000, never afterward, except on Sundays, fell below that figure, the total for June being considerably more than double the number for the previous month, while July showed a further improvement. August and September a large additional gain, and October an aggregate of nearly 8,000,000. That the attendance was not larger for the earlier part of the term was due not only to the unfinished condition of the Fair, but to the policy of the railroads, which made but a nominal reduction in fares, while during the later portion, financial panic and commercial prostration were strongly antagonistic factors. The summer and autumn of 1893 will long be remembered as a season of straitness and distress such as never before had overtaken the business community of the United States. Banks were suspending by the dozen; capitalists were trembling for their investments; factories were closing, and everywhere employment was scarce and ill requited. From such a condition of affairs the Exposition could not fail to suffer in common with all other enterprises.



PILGRIMS OF THE FAIR

While against the railroads there were many complaints, as to local facilities for transportation to the grounds, and within the grounds, there was nothing left to be desired; nor was there more of difficulty in handling the daily gathering of 200,000 or 300,000, late in the term, than in disposing of the 20,000 or 30,000 who formed the daily attendance during the opening week. Worthy of note was the decorous conduct of the sight-seers, largely composed of the citizens of Chicago and its suburbs, with farmers, business men, and mechanics from within a radius of 200 or 300 miles. Said Chauncey M. Depew in describing the attractions of the Fair:



PROFILE OF MANUFACTURES AND ELECTRICITY BUILDINGS

"After all the most pleasing thing about it is the crowd. It is a typically American, orderly, good-natured, intelligent crowd, anxious to see everything that is to be seen, asking questions in a way that makes you glad to answer them, and answering questions in a way that makes you glad to ask them. There is no crowding, no elbowing people out of the way to get a better place where temporarily there is a great number of people wanting to see the same sight. I have yet to observe on the grounds, by day or night, a single drunken or disorderly person, or any emergency at any time when a guard or policeman was required."

As with the attendance at the Exposition, so with its finances, the opening weeks were full of disappointment. For May the total receipts from all sources were only $616,140, or but a trifle above operating expenses. At this time the outlook was of the gloomiest, and it was even whispered abroad that the Fair would go into the hands of a receiver. Matters began to improve, however, and in June the income was $1,647,644, against an outlay of $630,505, leaving a balance of more than $1,000,000. In July there was a further improvement, the figures being respectively $1,907,194 and $598,319, with a surplus of $1,368,874. Yet now that half the term was completed, there seemed little prospect that all obligations could be met; for apart from the $5,000,000 in bonds loaned by the city of Chicago, there were many outstanding liabilities. But still the prospect brightened, August showing a surplus of $1,768,058; September, $2,632,372, and October, $3,792,467; the total income from admissions and concessions amounting to $14,141,242, the working expenses to $3,540,037, and the balance to $10,601,205, with average daily receipts, excluding Sundays, of $89,501, and an average outlay of $22,405.



A SIDE AVENUE IN JACKSON PARK

In his final balance sheet William K. Ackerman, auditor of the Exposition, presented a condensed report of its finances, showing receipts from all sources of $28,151,169, against a total expenditure of $25,540,538, thus leaving the Fair on its closing day with assets amounting to $2,610,631. From this, however, a large sum must be deducted for outlay yet to be incurred, while additional amounts would accrue from gate receipts, concessions, and other sources. For admission fees there had been received up to the 31st of October, $10,626,331; from concessionaires, $3,699,581; from the sale of souvenir coins with premiums thereon, $2,448,032; from subscriptions to capital stock, $5,604,172; from city of Chicago bonds, $5,000,000, and from miscellaneous items, $686,070. The expenditure was, for construction, $18,322,623; for general and operating expenses, $7,127,240, and for preliminary organization, $90,675. After all obligations had been paid, sufficient remained for a dividend of ten per cent on the ordinary stock, this being subscribed with little expectation of any return in cash. While the cost of construction and operation exceeded the original estimate by some $4,000,000, the estimated receipts—$10,000,000 for admissions and $3,500,000 for the sale of privileges and concessions—were more than $700,000 below the actual results.



A SECTION OF THE MINING BUILDING

As compared with the Centennial Fair the returns show more than a threefold gain, and were nearly twice as large as for the Paris Fair of 1889, the receipts of which far exceeded those of any former display. At Paris, however, the admission fee was but 20 cents against 50 cents at Jackson park, while the cost of construction and operation, with all other expenses, was less than one third of that which was incurred at Chicago. Including the $10,000,000 or $11,000,000 contributed by states and foreign nations, increasing the total to more than $36,000,000 in all, the Columbian Exposition was at least thrice as expensive as the most costly of its predecessors; needlessly expensive as some have thought, though considering the results achieved, there are few who will take exception to the investment of a few millions more or less. The preliminary work, before the foundations of the first building were laid, the drainage of marsh lands, the grading and filling, the viaducts, bridges, and piers, the construction of artificial waterways, these and other items entailed charges more than twice as heavy as the entire cost of the first great international exhibition, held in London in 1851. But the citizens of Chicago are accustomed to great undertakings, and they were not the men to hesitate at this the greatest of all.

While in other respects the financial estimates of the management were more than realized, they were entirely at fault as to the matter of salvage, for which only a nominal sum was received. After the close of the Fair the white city became a white elephant on the hands of the directors. Few wanted the buildings at any price, either for removal or for their materials; for Chicago was largely overbuilt, especially in the neighborhood of the Exposition, and seldom had so many dwellings and stores been vacant. Then came trouble with the park commissioners, whose valuation of the improvements made on the grounds differed widely from those of the managers. By the latter were scheduled under the heading of salvage some 20,000 tons of iron and steel, 30,000,000 or 40,000,000 feet of lumber, 22,000,000 bricks, and 1,400,000 square feet of glass. Then, as permanent improvements, there were dredging, filling, and grading; piers, bridges, walks, and roadways, with the piping which drained the marsh lands of the park, these and other items being valued at more than $2,000,000. The board of commissioners, on the other hand, estimated all permanent improvements at



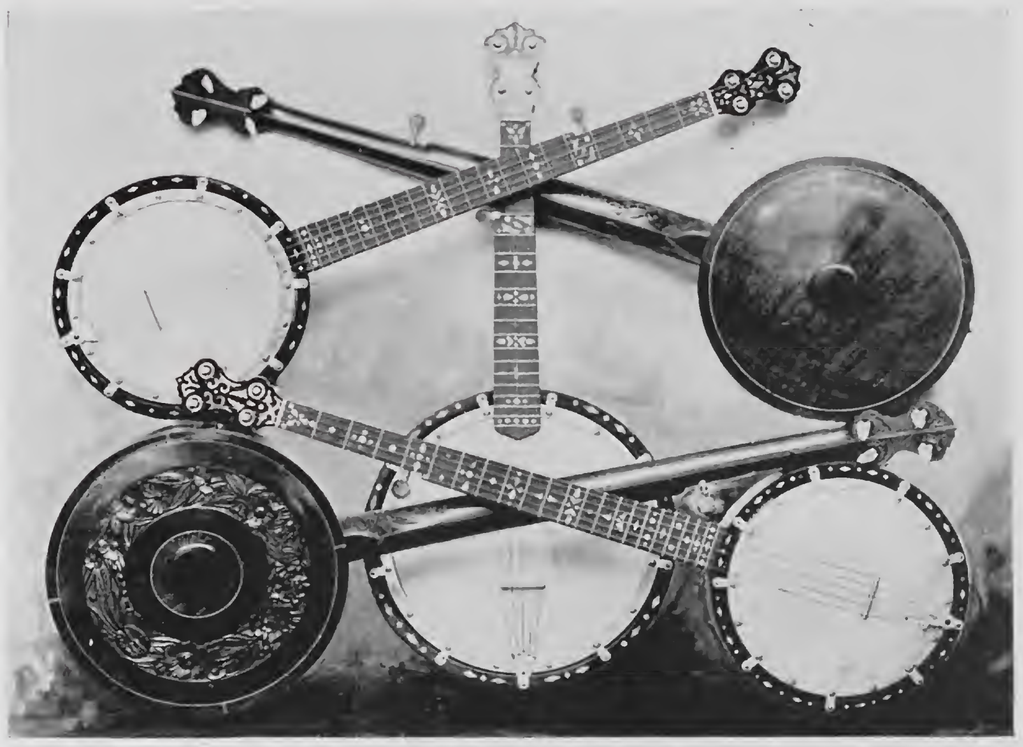
JUDGES OF AWARD

less than $100,000, claiming that Jackson park had been damaged, especially through the destruction of timber, to the extent of $540,000. The difference of $440,000 they demanded as the basis for a final settlement and for a release from all further obligations. At length the matter was settled by the payment of $200,000 and the transfer of the buildings and all other property to the board.

Still the question remained as to what should be done with the buildings, for which the highest bid from responsible parties was $80,000, or less than one per cent of their cost. But the problem was solved in a manner that few had anticipated, and for which the contracting parties were entirely unprepared. About dusk on the night of January 8th a fire broke out in the casino and thence swept across the peristyle to the music hall, all of which, together with the quadriga were consumed. Then the Agricultural building was threatened, and for a time it appeared that no human power could save from destruction the palaces clustered around the court of honor. But by a sudden shifting of the wind the flames were carried toward the Manufactures building, and through its glass roof and the clear-story beneath, a shower of firebrands fell among cases packed with exhibits, of which about $50,000 worth were destroyed, most of them by water and in the French section, where the remaining goods had not been packed, as elsewhere, in water-proof cases.

But that which was threatened on this winter night occurred a few months later. On the evening of

the 5th of July some lads at play near the terminal station observed the gleam of fire within, and entering the depot tried for several minutes to stamp it out; but these few minutes were fatal to the existence of several among the most sightly temples of the Fair. It was a hot summer day; the buildings were dry as tinder; water was scarce; the fire engines far away, and a fierce gale was blowing from the southwest, fanning into a conflagration that which when first discovered was but an insignificant blaze. By the time the engines were fairly at work the terminal station was one flaming mass, and leaping across the plaza the fire had seized on the Administration building, the dome of which fell with an appalling crash, covering with burning cinders and brands the Mining, and Electricity buildings, both of which were quickly ablaze. To these were added, a few minutes later, the halls of Manufactures and Transportation, though through the efforts of the firemen a portion of the latter was saved. Meanwhile from the railroad terminus the conflagration had spread to the Machinery and Agricultural buildings, the one being utterly destroyed and the other damaged almost beyond recognition.



PRIZE BANJOS

The burning of the Manufactures building was a sight that will never be forgotten by those who witnessed this tragic climax in the destruction of the white city. Almost as soon as the fire laid hold of it the vast semi-circular roof fell in, with its 11 acres of skylights and its 65 carloads of glass. Then it was seen that the whole interior was aflame, while from hundreds of windows tongues and jets of fire cast far on the dun waters of lake and lagoon their red and fearsome glare. Presently the frame began to totter; one after another the huge façades fell inward with a deafening roar, and of this mammoth temple of the Exposition there was nothing left, save for the lurid skeleton of a wall. It was now the time of the railroad strike, and as the conflagration reflected in the sky was seen by neighboring cities inland and on the shores of Michigan, messages of inquiry came pouring in by hundreds. Fresh in the minds of many was the great fire of 1871, and with anarchy and lawlessness still unchained, it was feared that the rabble was inflicting on Chicago a repetition of that dread disaster. As to the origin of either conflagration nothing definite was ascertained, though both were believed to be the work of incendiaries, probably of the vagrant horde which infested the streets by day and slept at night wherever darkness overtook them.

As to the influence of the Fair on the business interests of Chicago, while the immediate effect was to place a large volume of currency in circulation, and the future effect would be to open still further to her merchants the markets of the world, there were those who declared that in other respects it must for a time be a positive detriment. It is probable that the average amount expended by visitors was not far short of $2,500,000 a week, or about $65,000,000 for the six months' term. On the other hand there was overbuilding, with inflation of real estate values, so that several years must elapse before the normal growth of the city would warrant the prices demanded. For more than a year after Chicago was selected for the site of the Exposition, property continued to advance; but there it remained, awaiting the opening of the Fair, and there it still remains, awaiting purchasers who cannot readily be found. Long after closing day, many hundreds of costly tenements stood vacant, and as to furniture it could not be given away, serviceable mattresses, for instance, selling at one cent apiece, and those of superior quality for two cents. But with the means of speedy, cheap, and frequent communication extended in all directions, and especially toward Jackson park, this can be but a temporary



THE OLDEST STOVE IN AMERICA



THE PERISTYLE AFTER THE FIRE OF JANUARY 8TH, 1894



THE REMNANTS OF THE COLUMBIAN EXPOSITION

condition of affairs; for there is no more steadily prosperous city than the midcontinent metropolis, and none with stronger recuperative powers.

A feature in the Columbian Exposition as compared with others of its class was the enormous sale of exhibits, and especially of foreign exhibits, eight of the nations best represented selling in all more than $10,000,000 worth of goods. Of some of the articles displayed many duplicates were ordered, more than 200 being required, as is said, for one of the Italian wood carvings. During the six months' term at least $2,500,000 was expended in the various Italian sections, most of the purchases being of marbles, porcelains, bronzes, and wood carvings. Of the marbles, some of them very costly, few were returned to Italy, and in the Art galleries many of the Italian paintings were sold. To Germans about $1,500,000 was paid, mainly for carved ivory, meerschaums, and cutlery. Of Japanese porcelains, panels, and lacquer work almost the entire stock was exhausted, the sales in the Japanese sections, with those of England, France, and Austria, each exceeding $1,000,000, while to Spain was accredited $750,000, largely for works of art, and to Russia an equal amount for bronzes, furs, and gold ware.

As stated by the committee of awards, the number of exhibits exceeded 250,000, and of individual exhibitors was 65,422, to whom must be added those from France and Norway, whose groups were withdrawn from examination, increasing the total to nearly 70,000 participants, against 61,722 at the Paris Exposition of 1889, and 31,000 at the Centennial Exposition. At all the great world's fairs a large percentage of medals was awarded, so large it would seem, as somewhat to detract from their value. At Vienna, for instance, in 1873, about 26,000 medals were distributed among 42,000, or 62 per cent of the exhibitors, with 42 per cent at Philadelphia in 1876 and 55 at Paris in 1889. At Chicago the percentage was 36, or the lowest yet recorded, 21,000 exhibitors receiving 23,757 awards, for many were represented in more than a single group. Thus it will be seen that the proportion of awards to exhibitors was about as one to three, and to exhibits as one to eleven, a liberal but not an excessive distribution.

In the regulations governing awards it was provided first of all that "they should be granted upon specific points of excellence or advancement formulated in words by a board of judges or examiners, who shall be competent experts." In engaging the services of competent examiners the utmost care was exercised, correspondence being opened with many hundreds of societies and technical organizations, while at the request of the committee lists were submitted by foreign nations, including men of repute as scholars and scientists. There were in all 852 judges, divided into committees of which one was assigned to each of the main departments, one or more women to be appointed to each committee authorized to pass on exhibits consisting entirely or in part of woman's work. By the executive committee individual judges were appointed to examine certain groups and to report thereon, selecting those deemed worthy of awards and stating, as mentioned above, the grounds on which the selection was made, the report to be submitted to the department committee of which he was a member, and transmitted for final approval to the executive committee.



FESTIVAL HALL

In bestowing its awards the Columbian Exposition differed in some respects from most of its predecessors. First of all they were non-competitive; for as the executive committee remarked, in an exposition designed to illustrate the development of the resources of the United States and the progress of civilization in the New World, as compared with all participating nations, the results should be placed on a higher plane than merely to indicate the relative merits of competing exhibits. Rather should be indicated some independent and essential excellence in the article displayed, denoting improvement in the condition of the art which it represents. Thus the awards would constitute an enduring record of progress as represented by the exhibits in question, the certificate serving for identification and the medal as a memento of success. Of the latter there would be but a single class; nor would there be granted either money or graded awards of any description. All the medals were to be made of bronze and all must be alike, except that on each would be inscribed the name of the exhibitor. Under such a system there was, as might be expected, less friction than at former expositions, only 259 complaints being entered among more than 65,000 exhibitors, while of these but 43 were carried to appeal.

To the various committees with their individual members, and especially to the executive committee, of which John B. Thacher is chairman, credit is due for their faithful performance of a thankless and arduous

task. First there was the want of funds for clerical and other expenses, including the compensation of judges, for which no appropriation was made by congress until March of 1893. Then came the appointment of judges, who were selected with such discretion that not one in a hundred proved incompetent, and there was but a single case of doubtful integrity. The examinations made by these judges were conducted with the utmost care and precision; so that few deserving exhibits failed to receive an award, while the total number was kept within reasonable limits. Especially is to be commended the non-competitive system, avoiding the obnoxious and almost impossible task of a relative discrimination between more than three-score thousand participants, with all the jealousy and dissatisfaction which such an adjudication could not have failed to arouse. Nevertheless objection was taken by many, on the ground that it bestowed no definite and distinctive badge of merit on any single exhibit.

The architects of the principal buildings, of many of the state and foreign buildings, and even of the Midway and other structures received awards from the judges in the Liberal Arts department, in which are included public works and constructive architecture. Suitable honors were also bestowed on all nations, states, municipalities, public institutions, and other organizations which contributed substantially to the success of the



RUSSIAN CHORUS

Fair, together with such individuals and societies as by their achievements or inventions, or by the development of arts and industries, have aided the cause of civilization. For these, in addition to the Exposition medal, a diploma of honor was prepared. Both medals and diplomas were prepared under the direction of the secretary of the treasury, and with these the executive committee had nothing to do, except for the correction of clerical errors. For the diplomas the design was intrusted to William Low, by whom was executed much of the fresco work of the Fair, and for the medal to Augustus St Gaudens, of whom mention is made in connection with its decorative statuary. Both are of excellent workmanship and have been pronounced by competent critics superior to any before provided for similar purposes.

Early in the term of the Fair large numbers of exhibits were donated to the management, for among the groups were not a few which, though valuable as exhibits, had not enough intrinsic value to pay for the cost of homeward transportation. In the department of Mines and Mining, for instance, there were bulky collections from countries as far distant as New South Wales, the return of which was practically impossible, and if returned they would no longer be kept together as collections. From state and foreign commissioners came liberal offers of contributions, while in each division of the Fair many of the articles displayed were donated by exhibitors, and others could be had almost for the asking. Then there were the collections in the Anthropological division, with their rare and curious relics, most of them the property of the Exposition. What disposition should be made of all this property was a question that confronted the directors long before closing day drew nigh. Something should be done, and that at once; for the time was short, and many universities and scientific associations were anxious to secure the treasures which belonged of right to Chicago, there to be preserved intact in a memorial museum, which with further accretions would form such a storehouse as does not exist elsewhere in the United States.

During the first week of August the question was considered by the directory, three members of which—George R. Davis, Harlow N. Higinbotham, and James W. Scott—were appointed a committee to canvass the

situation and formulate a plan. But whatever was done should be done, as the directors considered, by the citizens themselves, as an enterprise belonging distinctly to Chicago, and not merely as an offshoot of its fair. Hence, a few days later, a meeting was held of men prominent in business, scientific, and educational circles, and after a brief discussion, two committees were appointed; one on organization, the other, including all the chiefs of departments with the director-general as chairman, to secure and take charge of exhibits. Within less than a month a large number of additional collections, such as would complete the scientific and historical chain of exhibits, had been obtained by purchase or contribution, mainly from the Anthropological, Transportation, and Mining divisions.

But in this the Columbian museum, as in the Exposition itself, was to be covered the entire field of science, giving perpetuity to much that was best worth preserving in the ephemeral city of the Fair. First, there should be secured a building of sufficient size, arranged with a view to permit additions in future years, and under control of an administrative board so organized as to be worthy of implicit confidence. These matters once assured, thousands of articles which else would have been scattered broadcast over the world were presented to the museum. In the first days of November was transferred, either as gifts or loans, the entire collection of Columbian relics in the convent of La Rabida, except for articles owned by the vatican and by the duke of Veragua. Then came a number of curios, documents, and other contributions from the United States government, including the weapons and garments of the ancient races of America. Denmark contributed a portion of the Thorwaldsen exhibit in the Manufactures building, including models of the house in which he was born and of the museum that bears his name, with photographs of his statues. Japan gave many artistic curiosities, with statistical tables and diagrams illustrating the resources of the country. So with other nations and with many of the states, while corporations and individuals were equally liberal, the total value of exhibits donated exceeding $1,000,000. Meanwhile agents were at work, selecting from each department of the Fair the choicest and most appropriate exhibits that could be secured at moderate cost.



MARSHALL FIELD

But more generous still were the donations in money from the citizens and corporations of Chicago, fully in keeping with their proverbial liberality, and stimulated doubtless by a worthy pride that would not permit the Fair to vanish without a monument commensurate with its greatness. First of all came a gift of $1,000,000 from Marshall Field, on condition that an additional $500,000 be raised and that $2,000,000 of Exposition stock be assigned to the trustees of the museum. Both conditions were readily fulfilled; Harlow N. Higinbotham, George M. Pullman, and L. Z. Leiter each subscribing $100,000, and Mrs Sturges and the City Railway company each $50,000, this total of $1,400,000 being increased by further benefactions. Thus freely did the city which collected more than $10,000,000 for the Fair contribute toward its perpetuation.

To erect a special building for the accommodation of the museum collections was not possible within the limit of time; nor was such a building required; for among the temples of the Fair, soon to be demolished and their contents removed, there was one at least that would answer the purpose for many a year to come. This was the palace of Fine Arts, the architectural gem of the Exposition and also one of its most substantial edifices, with spacious transept, nave, and galleries, affording with its annexes sufficient space for a museum almost as large as the one at the national capital. Here were arranged the various groups, including contributions from nearly all the main departments, from state and foreign exhibits, and from the Midway plaisance.

Another outcome of the Exposition, and a no less important one, though as yet on a smaller scale, was a permanent museum of woman's work, for which at the closing session of the Lady Managers, Potter Palmer, through his wife as president of the board, announced a subscription of $200,000, on condition that a proper site be secured.

Music was a strong feature of the Exposition, and like the Exposition itself of an educational and artistic character, though in a measure adapted to popular taste. The appropriations for this purpose were on a liberal scale, two special buildings being erected—Festival hall, facing an arm of the lagoon near the wooded island, and the music hall proper, forming a part of the architectural composition whose leading feature was the peristyle. Of these the cost was $222,000; for a permanent orchestra $175,000 was voted; out-door music costing almost as much, while running expenses and miscellaneous items swelled the total to $551,800, to which must be added the receipts from 137 concerts at which an admission fee was demanded, 60 being given free of charge.



AN ELECTRIC LAUNCH

In order to carry out the objects of the bureau of music the coöperation was invited of all the more prominent choral

societies throughout the United States. Invitations were forwarded to the New York Philharmonic society, the Boston and New York Symphony orchestras, and the principal male voice societies were requested to join in a three days' festival and to study the parts assigned to them. The most eminent of European composers, such men as Verdi, Gounod, Saint-Saens, Mascagni, Rubinstein, Dvorak, and Arthur S. Sullivan were asked to visit the Fair as guests, there to conduct renditions of their several works. To performers and musical organizations, including Joachim's string quartette and the choir of the Sistine chapel in Rome, a similar call was extended, and to all a liberal honorarium was tendered, not as a matter of business but for the expenses of travel.

Thus it will be seen that the musical programme of the Fair, as with its Congress Auxiliary, was in keeping with the grandeur of the material display; but though well worthy of the occasion, its success was less complete than had been anticipated, for against it several causes militated. First, the high railroad fares, in which no concession was made, forbade the coöperation of many of the best trained choral societies. Then, of the more prominent European musicians few were able to attend, and even from these the invitation was withdrawn; for over the Fair in its earlier term a financial crisis impended. As late as August, so discouraging was the business prospect that the management unwillingly accepted the resignation of Theodore Thomas as musical director, and made arrangements to disband its orchestra. Later, when prospects brightened, nothing could be done; for Thomas, who had been grossly maligned by a portion of the press, refused to return, and his orchestra had ceased to exist, though high-class music was still rendered under the direction of Max Bendix.

Of the concerts given by the Exposition orchestra 53 were free and there were 32 at which an admission fee was charged. The latter were intended to place before men and women of cultured musical taste a complete illustration of the highest forms of music as it exists among the foremost nations of the world. But while these concerts were in progress, the attendance at the Fair was most discouraging, and before the project could be fairly tested, the bureau of music was compelled to abandon many of its most cherished schemes. At the free concerts the average attendance was not short of 3,500 persons, all listening in wrapt attention, though most of them had never before heard a concert orchestra. It was among this class of people, among those whose knowledge of instrumentation was limited to the brass band and to such as the theatre affords, that Thomas sought to create a taste for music of the better class, giving them not the highest but the best of high-class popular music. Of organ concerts there were 62; of choral concerts 36, in most of which the Exposition orchestra participated; two concerts each were given by the Boston and New York Symphony orchestras, and there were a few chamber concerts and pianoforte recitals.

While none of the high-class concerts were continued throughout the term, there were many performances of special merit, among them the Wagner festivals and the orchestral symphony concerts. In the choral concerts, under the joint control of William L. Tomlins and Theodore Thomas, many prominent societies participated, including the famous Apollo club of Chicago. There were also concerts at which were heard the fresh, young voices of 1,000 children, and others were given by German and Scandinavian singers, and by the Lineff Russian choir. Organ recitals were frequent, among the performers being Alexandre Guilmant, whose appearance was one of the events of the season, as also was that of Paderewski, Lillian Nordica, and Antonin Dvorak.

A feature in the musical department of the Fair was the afternoon concerts given in the Woman's building, the success of which was largely due to Mrs Clarke, as chairman of committee on music, and to Mrs Barbour, chairman of the Illinois advisory committee. They were intended mainly to introduce to the public amateurs whose talents and training entitled them to recognition, and the conditions, as prescribed by Mrs Clarke and endorsed by Theodore Thomas, were strictly enforced, only female amateurs of special ability being allowed to participate. No diploma from college or conservatory was either necessary or sufficient; nor was preference given to musical prodigies merely as such, all candidates being rated on merit and not alone for technical proficiency. Professional concerts were also given and of these there were 31, with 14 amateur concerts, all of which were the better enjoyed that they lasted little more than an hour and with a limited number of performers.



THE COLUMBIAN LIBERTY BELL

At the band-stands and elsewhere out-door concerts were given daily or rather several times a day. Sousa's band was here with more than 50 pieces and with some of the best instrumentalists from the famous marine band of Washington, of which he was for many years the conductor. The Iowa state band was also a favorite, and among other home organizations were Liesegang's Chicago and Brand's Cincinnati bands, both of national repute. During the visit of the infanta Eulalia the Saragossa band gave several concerts in the Manufactures building; there was a Mexican orchestra, composed of some of the leading musicians and composers in the city of Mexico; in the German village was a choice infantry band from Berlin, under the leadership of E. Ruscheweyh, royal musical director, with the cavalry band of the Garde du Corps, of which G. Herold was conductor. In the Austrian

village the Imperial band of Vienna, with C. M. Ziehrer at its head, gave daily concerts, and in the Midway plaisance there were acceptable performances, in addition to the discordant music rendered by Bedouin pipe-players, Dahomean gongs, Chinese fiddles, and other ear-piercing instrumentation.

The drama was also represented at the Fair in open air performances, the first one being on the 30th of August, the site selected "the sylvan dell," near the German castle, and the play—*As You Like it*. The stage was erected around the trees, their foliage serving as canopy, with masses of shrubbery for background. Rose Coghlan assumed the part of Rosalind, Otis Skinner of Orlando, and E. J. Henley impersonated the melancholy Jacques. The leading parts were presentably acted, though Miss Coghlan, while full of sprightliness and verve, was altogether too rotund of form and lacking in the delicacy inseparable from this the most delicate of Shakespeare's creations. Especially was this noticed when she appeared in the garb of a boy, with painfully abbreviated tunic and lavish display of plump and tightly hosiered limb. The subordinate characters were feebly interpreted and the supernumeraries awkward and deficient in drill. Nor was the effect improved by the environment of this extemporized theatre; for the voices of the players must compete with the roar of passing trains, the whistle of steamboats, the chime of bells in the German castle, and the tune of "Dixie" vigorously rendered by a Missouri band.

An interesting feature during the last month of the Fair was children's week, when, the price of their admission being reduced to 10 cents, they came to the grounds by hundreds of thousands. For the poor free entrance was provided, many firms and individuals subscribing for from 1,000 to 5,000 tickets, while there were none who wanted for lunch or car fare. The Midway plaisance was the centre of attraction, especially as free rides were given on the Ferris wheel, though the donkey boys did a thriving business and Hagenbeck's menagerie was liberally patronised. The Fisheries, Transportation, and Children's buildings were well attended, as also was the Agricultural building, where the little ones were not slow to learn that biscuits could be had for the asking. It was a merry and somewhat boisterous crowd that filled the grounds of Jackson park, coming early, stopping late, and for the time being taking complete possession of the Fair.



IRVING M. SCOTT

Of the celebrations held by state and foreign participants brief descriptions have been given in connection with their special exhibits; but there were other celebrations of which some mention is here in place, and first among them the 4th of July, when 330,000 visitors passed within the gates, the largest number admitted until, near the close of the Fair, Chicago day exceeded all previous records. It was in truth a cosmopolitan gathering that was then assembled, and never before had the national birthday been honored by so many nations and in so many tongues. Dahomeans were here, their dusky forms attired in red, white, and blue; here were swart visaged Arabs, Soudanese, Egyptians, Algerians, Samoans, Chinamen, Javanese, with men from every state and from all European countries. The buildings and grounds were handsomely decorated, the multi-colored blending of myriads of flags, the roar of acclaim and salute, the bands and orchestral symphonies, the grewsome melodies of oriental musicians struggling with popular airs, all forming a pageant such as never before had been witnessed on the natal day of the republic.

Toward noon Vice-president Stevenson and his party arrived on the grounds, among those who came with him being the mayor of Chicago and Mrs Perry Stafford, the latter carrying the flag that Paul Jones bore into action, which later she hoisted to the top of the flag-staff nearest Machinery hall. At the stroke of twelve two large standards were unfolded east of the Administration building; on the right of the platform was unfurled the banner of peace, and then was raised an old and well-worn flag with only twelve stars on its field —the original stars and stripes. With the opening strains of "The Star Spangled Banner" thousands of voices joined in chorus, and far across the still lagoons was heard this pæan anthem, even to the triumphal arch where Columbus sat enthroned, as though at an ovation of the people for whom he opened the path to greatness. In the midst of the excitement Mrs Madge M. Wagner touched an electric button which set ringing in the city of Troy the Columbian liberty bell, fashioned in part out of the 250,000 pennies contributed by as many children. The addresses by the vice-president, the mayor, Hampton L. Carson, and J. S. Norton were in the usual vein of fourth of July orations, and long after the close of the ceremonies the audience held informal demonstrations.

Saturday, the 2d of September, was observed by the catholics as educational day, though few children were seen among the vast audience which gathered in Festival hall, the galleries and ground floor being occupied by the clergy, the sisters, and those who had come to hear the speeches and participate in the ceremonies. Archbishop Feehan presided, and on his right was Bishop Spalding, director of ceremonies, in whose charge were the exhibits described in connection with the department of Liberal Arts. The speakers, in addition to the president, were archbishops Hennessy of Dubuque and Ryan of Philadelphia, Judge Morgan J. O'Brien, who told what catholics have done for education in the United States, and Thomas J. Gargan, who spoke of "the patriotism and sequence of catholic education."

On Grand Army day, the 9th of September, about 8,000 veterans took part in the exercises appointed

for the occasion. The parade was marshalled by E. A. Blodgett, commander of the Illinois department, assisted by an efficient staff. Forming outside the Illinois pavilion, the divisions marched through the avenue of state buildings, the First regiment, headed by the Elgin band, acting as escort, followed by the Denver Zouave drum corps, the George H. Thomas post of Chicago, and other detachments from every section of the republic. Proceeding to the Administration building, the men were greeted by the notes of the new liberty bell rung by Alice Scott, daughter of Irving M. Scott of the California commission. Passing thence northward, ranks were broken in front of Festival hall, where a camp-fire meeting was held and brief addresses were delivered, letters of excuse and regret being read from ex-President Harrison, W. Q. Gresham, generals Schofield, Howard, Slocum, Miles, and others whose absence was regretted by their former comrades in arms.

During the last week of October it was estimated that 75,000 odd-fellows took part in the World's Fair celebration of their order, a parade held in Chicago on the 25th including delegations from every state in the union and from every province in Canada. On the following day the military and civic divisions assembled in Jackson park, and with them came members of the sister order, the daughters of Rebekah. The exercises were held in Festival hall, where shields were placed around the balcony, one over the principal entrance bearing the symbol of the linked chain and the initial letters of the watchwords, "Friendship, Love, and Truth." E. S. Conway, grand master of the jurisdiction of Illinois, was introduced as chairman by W. S. Frost, marshal of the grand lodge of that state. After an overture by the Iowa band, prayer was offered by H. W. Bolton, chaplain-general of the patriarchs militant, and John C. Underwood delivered the opening address, Charles S. Thornton tendering fraternal greeting on behalf of Chicago members, Grand Sire C. T. Campbell of London, Ontario, responding for the sovereign lodge to the chairman's proffer of hospitality, and Past Grand Sire C. P. Sander of New York thanking the jurisdiction of Illinois in the name of the society at large. On this and the following day were held competitive drills and sword exercises in the Live-stock pavilion, concluding with a dress parade in front of the Government building.



ODDFELLOWS AT THE FAIR

On the 25th of October, or marine day as it was termed, a parade of boats was formed in four divisions, their course being around the wooded island, through the north canal and grand basin, and thence returning to the starting point. They were of many types and represented many nations, forming a novel and interesting spectacle as they glided through the waterways. First came the naval squadron of gigs, dingies, cutters,



TURNERS' DRILL IN LIVE-STOCK PAVILION

launches, and whaleboats, from men of war, from the Viking ship, the caravels, and the New Bedford whaler moored off the grounds. The fisheries division followed, with dories, striker and folding boats, dug-outs, Lofoden island and other fishing boats, Eskimo kiaks, and Dahomean canoes. Next was the transportation squadron, in which were row-boats, canvas and other canoes, gondolas, coast-guard, motor, and life-boats, electric, steam, gas, and naphtha launches, a Norwegian pleasure boat, a Turkish caique, a bicycle boat, and a Ceylonese catamaran. In the last or miscellaneous division were boats of ancient pattern and Indian craft of strange device. In the afternoon there was hornpipe dancing by young girls in sailor garb, and at night a mimic battle in which fireworks took the place of weapons.

Two days later was held a reunion of city officials and prominent citizens gathered by thousands from every state to do honor to the Exposition and themselves to be honored. The exercises were held in the music hall and were followed by a concert at which were rendered the works of Chicago composers. Among other celebrations which cannot here be described in detail was that of the knights of Pythias, who on the 9th of August assembled in full uniform, led by Grand Chancellor Barnes of Illinois. The 20th of that month, the birthday of Charles Carroll of Carrollton, one of those who signed the declaration of independence, was selected by the Patriotic order of the sons and daughters of America. A day or two later the Foresters held festivity, and on the 25th, the colored races, with Frederick Douglass as president, met in Festival hall, other days being selected by the Turners' union, the butchers and grocers, and the United Typothetæ of America.



LOVING CUP PRESENTED TO THOMAS W. PALMER

In the Massachusetts building, a few days before the close of the Fair, the chiefs of departments gave a reception to foreign and national commissioners, the Board of Lady Managers, the directors, and other officials. The floral decorations were a feature of the entertainment, the tables and mantels being crowned with roses, the brackets draped with smilax, and every niche and corner filled with palms and ferns. In the upper hall was stationed the Mexican band, and later appeared the Lineff Russian choir, followed by a vocal concert. Supper was served in the Dutch kitchen, and in the centre of the refreshment table, well stocked for the needs of a thousand guests, was a handsome pyramid of roses.

On the 11th of October the Fair officials invited the foreign commissioners to a banquet held in the music hall, for now the last instalment of debt had been paid, and fitting it was that men should give themselves over to feasting. The entertainment was of a cosmopolitan character and without undue formality, the guests passing between courses from table to table, renewing old friendships and forming new ones. The walls were decorated with the flags of all nations; the music of all nations was rendered by their several bands, while costumes were no less varied, the sombre evening dress of the Anglo-Saxon contrasting strangely with the gorgeous uniform of the oriental and the fantastic headgear of the Corean. The tables were arranged in artistic groupings, curved, crescent, and cruciform, and with a view to avoid all suggestion of favoritism. The sixteen great columns which encircle the hall were entwined with wreaths of oak leaves; the arch at the further end was festooned and garlanded in green, interspersed with roses of every hue, and overhead were electric lights in special designs. In the gallery the fashionable women of Chicago mingled with the wives of foreign commissioners, listening to the speeches, which were many; for it was not until an early morning hour that the last toasts were honored.

To Thomas W. Palmer, as president of the World's Columbian Commission, a farewell banquet was given by his associates, among the guests being the representatives of many states and nations, those who had

helped to make the Fair a success paying tribute to one whose name will ever be associated with what has been not inappropriately termed "the eighth wonder of the world." Introduced by George V. Massey as chairman, the president spoke, as is ever his custom, briefly and to the point. "Without some national body," he said, "the Chicago Fair would have remained a Chicago Fair. I accepted the presidency with considerable trepidation, and had I known what was involved, would probably not have done so; but once in office I felt like a man who had hold of a live wire, and am glad that I did not let go."



GEORGE V. MASSEY

M. H. De Young was the guest of honor at a banquet given to him as director-general of the Midwinter Exposition to be held in San Francisco, and also as second vice-president of the national commission. On the 11th of November a parting feast of which George R. Davis was the chosen recipient, closed a long series of World's Fair entertainments.

Many were the distinguished men and women who visited the Fair, some of royal, some of noble lineage, and others who owed nothing to the accident of birth. First of all was the infanta Maria Eulalia, who came here at the invitation of congress as the guest of the nation and the representative of Spanish royalty, accompanied by her husband the prince Antonio. Several of her visits to the Fair were made incognito; for when known, they never failed to attract a crowd, the 8th of June, a day set apart to do her honor, bringing to the gates 169,000 visitors, by far the largest attendance so far recorded. Escorted to the grounds by a troop of the Chicago hussars, she was received by officials with the utmost deference and met with every possible attention. But the infanta preferred rather to go her own way and see the White City for herself, as inclination prompted. After making a tour of the grounds, breakfasting at the Administration building, sipping tea in the Cingalese pavilion, and holding a reception in the assembly room, she dismissed her carriage and escort, and passing forth unnoticed from the Woman's building, joined in the throng of sight-seers, remaining for the illuminations and the fireworks, of which there was a brilliant display. On another occasion she inspected the ruins of the cliff-dwellings and the Columbian relics in the convent of La Rabida; witnessed an Indian war-dance, and enjoyed a trip on the intramural railroad; but her favorite resort was the Horticultural building, in which her country appears to excellent advantage. At her last visit she took luncheon at the Pickwick club-room of the White Horse inn, where the attendance of a pompous English butler, his massive calves encased in black silk stockings, did not enhance the enjoyment of the feast. Returning to New York by way of Niagara, a few days later she set sail homeward, bearing with her the good wishes of a people of whom, as she said, she would ever cherish the most pleasant remembrances.

Archduke Ferdinand, heir apparent to the throne of Austria was among the pilgrims of the Fair, though few at the time were aware of it; for he came merely as a visitor and avoided all publicity. So with Duke Alexander, cousin to the tzar, whose name appeared on the hotel register as Lieutenant Romanoff. Among other royal visitors was the sultan of Johore, the exhibits from which country, especially in the Agricultural building, were somewhat of a surprise. From India came several of her native rulers, of whom Jajat Jit Singh, maharajah of Kapurthala, aroused the most interest. He was a man of imposing presence, nearly six feet in height, and except for his turban, dressed in faultless modern costume, speaking several European languages, and well informed on the questions of the day. His main object, he said, was to study the latest inventions, especially in electrical appliances, and these he inspected thoroughly, spending most of his time at the Fair. Another Indian potentate was the rawab of Rampur with his suite, the party visiting the Exposition while making a tour of the world by way of China, Japan, and San Francisco.

Of the visits of the lord-mayor of Dublin, the earl of Aberdeen, and other eminent personages, mention has been made elsewhere in this work. To the mayor a public reception was given by the city council of Chicago, and the earl was received by the director-general, in whose parlors assembled a number of officials and chiefs of departments, with several of the lady managers. Benjamin Harrison with his party, among them was Senator Morrill, was the guest of Thomas W. Palmer; but his visits to the Fair were of an informal character. To Secretary Carlisle and Governor West of Utah was given in the Kentucky building an orthodox Kentuckian feast. Cornelius Vanderbilt and his sons arrived in their private car, which served them also as a hotel. Among men of science was Thomas A. Edison, whose inventions have been displayed at every international and scientific exposition held within the last score of years. He came unheralded, avoiding all notoriety, and of his coming only a few of his intimate friends were informed. From France as guests of the society of American engineers, came forty of her most eminent men in that profession, and with them the sculptor Bartholdi, other men of science, art, and letters arriving by hundreds and thousands; for as Edison observed, "no one who made his living by his intellect could afford to stop away from it."



THE INFANTA EULALIA

True there was a reverse side to the glories of the Fair, but on this in these closing lines I need not dwell. Among the visitors was a small but demonstrative contingent which seemed to have come to Chicago for no other purpose than to complain, men and women to whom the colossal grandeur

of a display contributed by all the nations of earth was as nothing compared with the imperfect cooking of a meal. But of these narrow souls there were not many; for with rare exceptions all minor drawbacks were lost in a sense of gratitude and admiration, the young that they had witnessed a spectacle the like of which they had never looked upon before, and the old that they had lived to see it.

To those who created and conducted the Fair, to its national commission, its board of directors, its special boards and committees, its artificers, and its chiefs of departments a parting tribute should be given. Though men of affairs and accustomed to large undertakings, the managers came to their work untried, inexperienced, new to the task, and only was the final result achieved by working together in perfect harmony, loyally and for a common cause. During the formative period of the Exposition, and even after its completion, they confronted and overcame such obstacles as seldom before obstructed the path of human enterprise. First there was the indifference of foreign nations, of many of the states, and above all the indifference of congress, which gave but grudgingly of its ample store and encumbered its gifts with many a vexatious restriction. As to the financial difficulties they appeared at times insuperable; for, as we have seen, the expense of construction far exceeded the original estimate. But the directors grappled manfully with the problem, as did others who united together for a single purpose, rich and poor alike giving of their substance and their time, each sparing what he could from his abundant or scanty means. That meanwhile their own business interests were suffering was not for a moment thought of; they would stand by the Fair until its gates were closed, bringing to bear on their task all the energy and zeal of which they were possessed, as though each one were solely responsible for its success.



F. W. PECK, CHAIRMAN AND FIRST VICE PRESIDENT FINANCE COMMITTEE

While many contributed to the cause of the Exposition, their share of work, of means, of influence and ability, it must be confessed that its president was the one whose hand was most strongly felt at the lever of this mighty enterprise. Throughout the three long years of preparation he had been one of the leading members of the directorate, serving on the most prominent committees, shaping its monetary affairs, and assisting to mature the plans which, in the finished fabric of the Fair, gave to the world results that disarmed all criticism. But during the momentous period preceding the opening day there was needed as manager-in-chief a man specially qualified by experience, training, and natural gifts to grapple with the grave financial and other problems connected with the task of administration. For such a task Harlow N. Higinbotham had been prepared by nearly half a century of earnest toil and endeavor, mainly in the commercial emporium of the west. Leaving in early youth his father's farm near Joliet, within forty miles of the scene of his crowning triumph, after completing his education at a commercial college in Chicago he was employed in many capacities; first as a bank clerk, then as cashier of a bank, and later connecting himself with the principal dry-goods house of the western metropolis, to which he returned after serving in the civil war with ability and zeal so marked as to secure for him speedy promotion. Then he began life anew as bookkeeper in a concern which, largely through his efforts, has become one of the most prominent business organizations in the world, rising step by step until admitted into partnership, and as he rose, aiding to build up the fortunes, not only of the firm, but of the city and of the region tributary thereto. As president of the home for Incurables also, for which he helped to secure an endowment of $500,000, as president of the Free Kindergarten association, and in connection with other worthy and far-reaching charities, he has made himself felt no less by his administrative powers than by his numerous benefactions. Such a man was well fitted for the high office to which he was summoned as head of the Council of Administration.



W. FEARN, FOREIGN AFFAIRS



C. H. SCHWAB, MEMBER COUNCIL OF ADMINISTRATION

The Columbian Exposition has fulfilled its purpose; its mission is ended; its exhibits scattered to the four quarters of the earth, and its buildings vanished into air. While foreign nations played well their part, the credit belongs above all to the United States and especially to its western metropolis. That Chicago, which had ever been considered the embodiment of the material, should appear as the highest embodiment of the ideal; that a city noted mainly as the incarnation of the eager, restless, spirit of a commercial age, a city which, destroyed in a night, sprang almost as suddenly into yet more forceful life, surpassing all rivals, but, as was thought, molding itself only into forms that tended to the growth of riches, to the development of business prosperity; that such a community should blossom forth at once into the ripest fruits of culture, presenting to the world the priceless heirlooms of the past, the grandest results and ideals of the present; this is what made Chicago more of a wonder than the fairy-land of her creation, giving to her the crown of victory, as to one who has nobly repaid a nation's trust.



DIRECTOR DE WITT C. CREGIER

Elsewhere has been described from its inception the project of the Fair, the worthy ambition which inspired it, the skill with which it was planned, the liberal



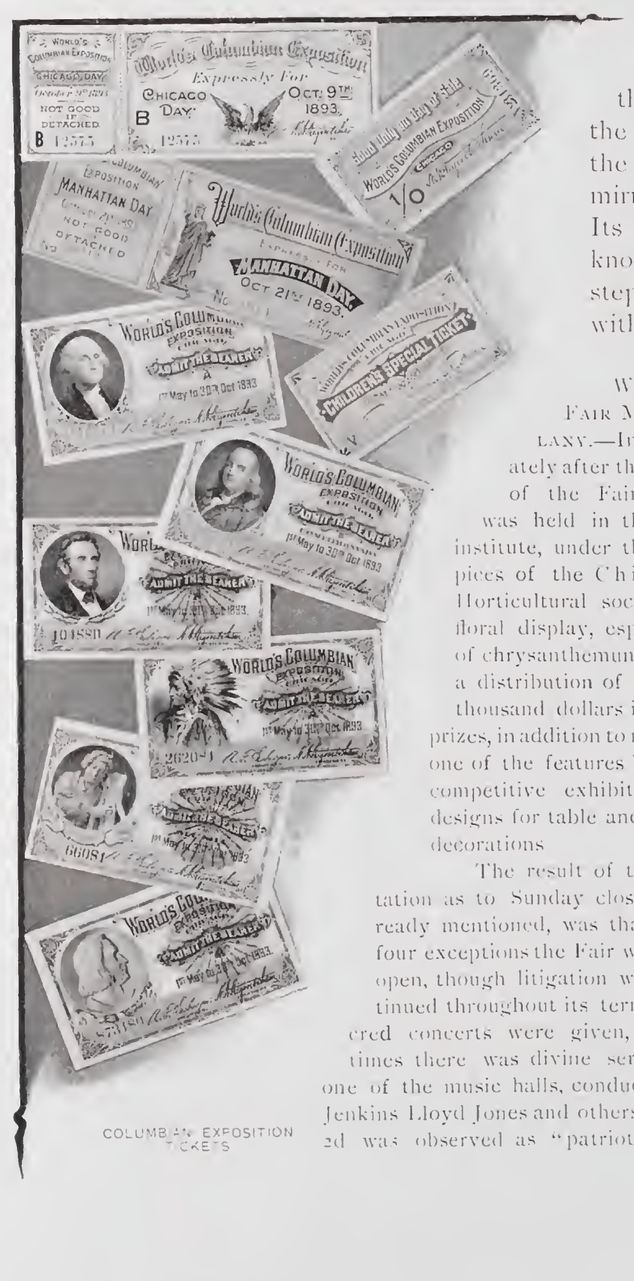
C. L. HUTCHINSON, CHAIRMAN OF FINE ARTS COMMITTEE

spirit in which it was carried to execution; how there were engaged for each department the highest available talent, the ablest of architects, landscape artists, and engineers, the foremost of sculptors and decorative painters. But greater than the spectacle itself were the lessons which it taught; for here in these temples of industry, science, and art, in these avenues lined with the pavilions of states and nations, one might see more of foreign lands, might learn more of other sections of his own land, than years of travel could teach him. Never before was gathered together so varied and instructive an ethnological collection, not only in the hall of Anthropology but in the Midway plaisance, where were presented types and illustrations from the farthest ends of the earth, forming of itself a world in miniature. Here were the representatives of many nationalities, living their natural lives, practising their domestic arts, indulging in their favorite pastimes, and thus affording to the observer an opportunity to study these barbarous, civilized, and semi-civilized communities, without the necessity for travelling or for sojourning in their midst.



H. O. EDMUNDS, SECRETARY OF THE EXPOSITION

Nor should we forget the part that woman has played, the countless evidences of an enlightened and progressive womanhood, showing that of such women there are now a hundred where in former ages there was one. Of this none can doubt who examined the collections in the Woman's building, in the hall of Manufactures and Liberal Arts, where many of the articles were fashioned by female hands, while even in the palace of Fine Arts women were largely represented. If here and there were exhibits which spoke of "fingers weary and worn," of eyes which saw no sunlight, of cheeks pallid with confinement in dreary and crowded workshops, such emblems of bondage were rare as compared with numberless products in all degrees of beauty and utility, coming from woman as an exponent of the freedom and equality of the age. In this, as in other respects, the Fair has been to the world a revelation, to Americans an inspiration. It has shown, as no written or spoken words could show, the power and progress of a nation where all are free to strive for the highest rewards that energy and talent can win. In this the heroic age of industrial development, in these closing years of the nineteenth century, it has presented to the world, as in a mirror, the highest achievements of which mankind is capable. Its future influence none can measure or foretell. This only we know, that it will live; will live not only as a memory, but as a stepping stone to greater and nobler efforts, to be compensated with yet richer and more abundant fruits.



COLUMBIAN EXPOSITION TICKETS

WORLD'S FAIR MISCELLANY.—Immediately after the close of the Fair there was held in the Art institute, under the auspices of the Chicago Horticultural society, a floral display, especially of chrysanthemums, with a distribution of several thousand dollars in cash prizes, in addition to medals, one of the features being a competitive exhibition of designs for table and other decorations

The result of the agitation as to Sunday closing, already mentioned, was that with four exceptions the Fair was kept open, though litigation was continued throughout its term. Sacred concerts were given, and at times there was divine service in one of the music halls, conducted by Jenkins Lloyd Jones and others. July 2d was observed as "patriotic Sunday," when there were special exercises in Festival hall, with a reunion of army and navy men.

At the head of the department of admissions was Horace Tucker, for many years freight agent of the Illinois Central railroad, Captain De Remer being appointed chief inspector. By the latter a force of 550 ticket sellers and takers was organized, drilled, and uniformed by the 1st of May, and so perfect was the system that less than 200 errors were found among all the millions of tickets issued. As to pilfering $100 would more than cover the amount that was detected, 90 per cent even of the change carelessly left at the ticket booths being returned on application. There were in all 182 ticket windows, 97 ticket booths, 326 turnstiles, and 172 exit gates, thus avoiding the possibility of serious delay, no matter how large the crowd.

Long before the opening of the Fair, its managers were besieged with applications for season tickets, less for actual use than as souvenirs. These were printed in four different designs by the American Bank Note company of New York. On the face was inscribed in scroll work at the top "World's Columbian Exposition, Chicago;" beneath this the words "Admit the Bearer" and the dates between which the ticket was available. On the left was the portrait of Columbus, Washington, Lincoln, or of an Indian chief, and at the foot were the signatures of A. F. Seeberger and H. N. Higinbotham. About 60,000 passes were issued, most of them to exhibitors, concessionaires, and members of the press, the total number of admissions by pass, including return checks, exceeding 6,000,000.

Near the Service building was a police station, with an entrance from Stony Island avenue. Several hundred experienced detectives



ROBERT A. WALLER

were stationed on the grounds under the direction of John Bonfield as chief; for the White City was a Mecca for thieves as well as for honest folk. The secret service force was composed of expert thief-takers from all parts of the United States and even from European countries. Those who were identified as thieves were shown to the officers and thereafter forbidden to enter the gates. They were also brought before the members of the city police, and thus a brand was placed on such of the fraternity as intended to make Chicago the sphere of their operations. A lost and found department was included in the secret service bureau, with an elaborate system of records and reports. During the first seven weeks of the Fair 550 articles were recovered of every conceivable description, from umbrellas to diamond rings and purses well stored with greenbacks.

In connection with the police service was the fire department, with Edward Murphy as chief, the efficiency of which I have already had occasion to notice. There were six circuits to each system and the two were conducted on parallel lines, most of the alarm boxes being placed on one side of the principal buildings, and the police boxes on the other. There was also a supplementary system which connected the central stations with all the police and fire stations on the grounds. There were two telephone systems, one a branch of the Chicago City Telephone company, and the other under control of the Exposition authorities, its service limited to communication within the park.



GEORGE SCHNEIDER

Adjoining the service building was the medical bureau and emergency hospital, of which John E. Owens was in charge, with resident and attending physicians, a staff of trained nurses, and all appliances for immediate relief, the hospital not being intended as a place for continuous treatment. Patients were of course retained until they were in a condition to be removed; but were so effectively treated that most of them were taken to their homes before nightfall. During the first weeks of the Fair few seats were provided, and on a single day nearly 200 cases occurred of prostration from fatigue and other causes. As the crowds increased and the hot weather came, the physicians found no lack of occupation; but doctors and nurses were always at hand, dividing the watches between them, day and night. The following excellent advice to visitors from Doctor Hillmantel applies to all gatherings of sight-seers. "Come to the Fair early; avoid exposure to the sun; keep quiet during the heat of the day, and on hot days explore only a limited area. Don't loiter or saunter, but move rapidly from point to point; when examining an exhibit stand still and take it in with the eyes and not with the feet; for nothing is more fatiguing than the constant shifting of the body's weight from one foot to another. Eat when you are hungry, without waiting for meal time, and eat all you can. Be cheerful; keep your temper, and don't find fault. Don't take children too far around the grounds, and place in roller chairs or leave at home the very aged and infirm."



JOHN E. OWENS

For catering the largest concession was granted to the Wellington Hotel company, by which were opened numerous places of refreshment, supplied from a large building in the southwest corner of the grounds. The financial success of the Exposition was largely due to the committee of ways and means, of which Lyman J. Gage was chairman, the members including Harlow N. Higinbotham of the firm of Marshall Field and company, George Schneider, president of the National bank of Illinois, Robert A. Waller, and others well known and trusted in the business circles of Chicago.



H. H. HOLCOMB, CHIEF OF TRANSPORTATION

It was estimated that 18,000,000 passengers were carried on the trains of the Illinois Central railroad between May 1st and October 30th, express trains, with cars specially constructed for the purpose, starting from the lake front in Chicago at intervals of three minutes, and making the trip in a quarter of an hour or less. The largest traffic was on Chicago day, when 541,312 passengers were carried on 1,095 trains, something unprecedented in railroad service. During these six months no casualties occurred through the fault of the company's officials and only four or five in all. The elevated railway and the lake steamers were also favorite modes of travel, and the cable roads carried large numbers. Then there were vehicles of all descriptions from tally-hos to tradesmen's wagons.

No light or pleasant task was that of the committee on awards, and especially of John B. Thacher, chairman of the executive branch. Many were the protests against what was termed the single judges system, though as a fact several judges might be appointed if necessary, and each written report recommending that an award be granted must be submitted for approval to the proper department committee, with right of appeal to a special court. Awards were granted for all classes of exhibits from locomotives to travelling trunks, of which latter it may here be remarked that those of American manufacture were most in favor and received the largest number of medals.



PRIZE EXHIBIT OF TRUNKS



CHAPTER THE TWENTY-EIGHTH

THE CALIFORNIA MIDWINTER INTERNATIONAL EXPOSITION



TO describe in these pages the California Midwinter Exposition was no part of my purpose when I took upon myself the task of writing *The Book of the Fair;* nor could it have been so; for at the time no such project was undertaken or even entertained. But here is an outcome of the Columbian Exposition without which a description of the latter could not be considered as complete; for not only were the best exhibits from the Pacific coast transferred with many additions to their winter quarters, but here also are not a few of the most attractive features in the Midway plaisance and in other portions of the great entertainment at Jackson park. Two unsuccessful efforts had before been made to place California more prominently before the nations; but here was an opportunity such as never before had occurred, and might not occur again for at least a score of years. While by no means a mere imitation of its predecessor, and with much that is novel and original, it may be said that as a purely original enterprise the Midwinter Fair could not have been opened for ten times its actual cost and probably could never have been opened at all.

Early in the season of the Chicago Fair a wish was expressed by many of the exhibitors that another international exposition could be held somewhere within the limits of the United States, but one on a smaller scale and more select in character To make even a superficial examination of the collections housed in Jackson park was the task of several weeks, and to examine them critically and in detail the entire six months' term would not have sufficed. Under such conditions only the most striking exhibits found favor with the majority of sight-seers, while even the best appeared at a disadvantage amid all these acres of floor space, and of many the effect was marred by juxtaposition with others of inferior quality. Here was the main drawback to the Columbian display, its only serious drawback; so that men said as Edward Everett Hale remarked of the Vienna Exposition: "If this be a specimen of the world, then one wants a museum which shall be a specimen of the Exposition."

Among others to whom the project commended itself was Michael H. de Young, vice-president of the

Columbian commission, one of the California commissioners to Paris in 1889, and thus a man of experience in the affairs of international expositions. Why not hold such a fair in San Francisco, one that should open in midwinter and be known as the Midwinter Fair? Here would at least be a novel display, and one whose attractions would be increased by its environment, especially to those who came from afar to see it; for in winter the golden state is attired in robes of emerald, a covering of verdure taking the place of snow, and at no season of the year does the climate appear to such advantage. Another incentive was that although the Californian exhibits at Jackson park, in common with those of other sections of the coast, were a source of general admiration and surprise, to Californians themselves they were a disappointment; for, as was thought, they did not adequately represent the resources and achievements of the community. As compared with less favored regions California was little known; her changed conditions were little understood; and to make her known, to place her in the rank to which she was entitled among the sisterhood of states, was the main object of the Midwinter Exposition.

To a few of the more prominent Californians then sojourning in Chicago De Young explained his plans, with the benefits that would result therefrom, and on the 1st of June the announcement was made that an



THE COURT OF HONOR

international fair would be opened in San Francisco a few weeks after the close of the Columbian Exposition. At first it was received as a joke, or at least as a rash and ill-advised project, one for which the time was too short, for which no state, municipal, or government aid could be expected, and that must be achieved, if achievement were possible, entirely through the private subscriptions of a community overtaken by severe and protracted business depression. No wonder that with these drawbacks, and coming as it did immediately after the most imposing display of industries and arts that the world had ever witnessed, moneyed men regarded the scheme with disfavor.

But the projectors were thoroughly in earnest; nor was it from moneyed men but from the people that they expected to raise the necessary means; for this was to be a people's fair, an enterprise in which all might join, in which all might feel a worthy pride, as the first undertaking of its kind that had ever been attempted on the Pacific coast. At a second meeting, held in Chicago on the 11th of June, $41,500 was subscribed as a nucleus for the Exposition fund, and a few days later 4,400 exhibitors at the Columbian Fair had promised as

many exhibits, only those of superior quality being accepted. If at first the wealthier citizens of San Francisco were somewhat lukewarm in their support, this feeling was presently overcome as meetings were held, subscriptions came pouring in, and it was seen that the public had taken hold of the matter with the enthusiasm characteristic of Californians. Before the close of August there was sufficient money on hand to insure the success of the project; congress gave to it official sanction, and meanwhile a permanent organization had been effected, with De Young as president and director-general, Irwin C. Stump as vice-president, P. N. Lilienthal as treasurer, and as secretary, Alexander Badlam, other members of the executive committee being Colonel A. Andrews and Robert B. Mitchell, all citizens of San Francisco. To these were later added Eugene J. Gregory of Sacramento, J. E. Slauson of Los Angeles, Felton G. Berry of Fresno, and Jacob H. Neff of Colfax. There was also a finance committee, of which W. H. L. Barnes was chairman, with Herman Shainwald as manager, and by both excellent work was accomplished, no effort being spared to secure such a fair as would be a credit to California, to the Pacific coast, and especially to the city by the Golden Gate.

The site selected was in Golden Gate park, which a score of years ago was little more than a wilderness of sand-dunes, and is now the pride of the home-loving San Franciscan, its spacious avenues lined with trees and its grass-planted surface covered in part with shrubbery, with acres of lawn, and flower-beds filled with semi-tropical plants. Extending from the shore of ocean to within somewhat less than a league from the business quarter of the city, and with a surface of more than 1,000 acres, it is reached by several lines of cable cars running at from three to five minute intervals. Near the centre is "Concert valley," at the time unreclaimed but intended later as a permanent location for the purpose which its name implies. This was the chosen spot, its area with additions as afterward needed amounting in all to more than 160 acres; for applications for space were far in excess of the original estimate. No great expense for grading was needed, nor any large outlay for landscape decoration, since in the park itself were all the elements of the picturesque. At one end of the site is Strawberry hill, forming the background of the vista, on its crest an observatory and beneath it an artificial lake. Here, under the shadow of the hill, within sight and sound of the Pacific, the dedication ceremonies were held on the 24th of August in the presence of 60,000 people, by each and all of whom it was hoped that the event would mark a new epoch in the history of California.



BONET'S ELECTRIC TOWER

Not least among the wonders of the Columbian Exposition was the speed with which its structures were erected; but as to those of the Midwinter Fair it may be said that, like the city which contains them, they sprang up almost in a night. It was not until late in September that the contracts for the first buildings were awarded, and yet at the formal opening on the 27th of January, a space of about four months, all the principal and most of the minor pavilions were practically completed. While none of them rival the magnificent proportions of the Columbian temples, there are many whose skilful composition and beauty of design leave nothing to be desired. The larger edifices, five in number, are mainly of oriental type, built around the grand court, or court of honor, in Concert valley, and approached by a series of stairways and terraces. Giving further emphasis to the architectural scheme is the Bonet electric tower in the centre, an iron structure, 266 feet high and of symmetric outline. In this group of edifices utility has nowhere been sacrificed to mere display, nor is there undue striving after effect; but rather a just adaptation of parts, an interdependence one on another, and of all on the landscape setting. There is nothing gaudy about them, and there is nothing of incongruity. The coloring is subdued; the façades are substantial, staff-covered, and somewhat heavy in outline; the windows arched and deep-set, the roofs low, red-tiled, and surmounted with domes of blue or gilded pinnacles and kiosks, while shady loggias and arcades recall to mind the mission days of Franciscan padres. Whether considered

apart or as a single architectural composition with harmonious blending of device, the buildings are a credit to their artificers, and the more so that their plan is original, so far at least as originality consists in the adaptation of ancient methods to modern conditions.

In the decoration of the grounds, and especially of the central court, it was intended to give to them in part a semi-tropical appearance, and for this purpose everything was at command; for the park commissioners placed at the disposal of the landscape gardeners thousands of trees and plants, while generous contributions were received from every portion of the state. Palms are everywhere, rising from terraces and lawns, from towers and roof gardens, from the fronts of buildings and the borders of avenues. Almost side by side with the floral wealth of California and of eastern climes are the flowers and shrubbery of southern Europe, of India, Australia, New Zealand, the Sandwich islands, and Japan, the specimens changed with the changing seasons and at all seasons loading the air with perfume and presenting a brilliant array of living color. At the head of the court is a fountain, with figures symbolic of California, and from an electric fountain at the opposite end countless jets of water rise to a height of 100 feet in wondrous shapes and in every hue of the rainbow. Elsewhere are the colossal statues of Columbus and Isabella, familiar to all pilgrims of the Columbian Fair. Surrounding the plaza is a spacious roadway, its centre macadamized and its sides forming polished walks of bitumen, within which are open spaces where thousands may stroll or linger without overcrowding.

Passing into the court from the principal entrance, the visitor finds himself in front of the Manufactures building, and here, if it be his first visit, he will tarry for a moment to view in their entirety the leading features of the Fair. Through the mist and spray of the fountain at the further end is seen the Administration building; on the right are the palace of Fine Arts and the hall of Horticulture and Agriculture; on the left the temple of Mechanical Arts, these with a few minor structures forming the architectural environment. From the roofs of the various buildings and from flagstaffs around the court are displayed the banners of all nations, while walls of ivory white relieved with more brilliant hues, gilded spires, and sombre tinted domes and cupolas, all contrasting with the rich green foliage, afford a striking combination of colors. Eastward is the harbor of San Francisco, flanked by a range of purple hills, with Mount Tamalpais keeping guard over the Golden Gate, beyond which are the blue waters of the Pacific.



LOOKING NORTH FROM THE ELECTRIC TOWER

As in the Columbian Exposition, the largest structure is the hall of Manufactures and Liberal Arts, planned by A. Page Brown after the Moorish style of architecture, the building with its annex and galleries having a floor space of 177,000 square feet. At each of the corners is a pavilion surmounted by a cupola 50 feet high, those that front on the central court being connected by a deeply recessed arcade, in the centre of which is the principal entrance, above it a lofty dome painted in turquoise blue and capped with a lantern finished in gold. Here is the point of architectural emphasis, the design being further relieved from monotony



MANUFACTURES AND LIBERAL ARTS BUILDING

by figures symbolical of the arts and sciences, by gilded minarets, and by the flags and coats of arms of all the states and nations represented within, these extending the entire length of the cornices. The roof is of glass and dark red Spanish tiles, an upper gallery opening into a roof garden planted with fuchsias, palms, chrysanthemums, and the out-door plants which thrive in the mild California winter. In the interior, spacious aisles intersected by a central nave divide the groups of exhibits, among which is much that was best worth preserving in the temples of Jackson park.

The exhibits, of which Frank McCoppin is in charge, are arranged in three divisions—Manufactures, Liberal Arts, and Ethnology and Archæology, the last including such as relate to the progress of labor and invention. In the department of Manufactures are nearly all the classes contained at the Columbian Exposition, with others which there were displayed in separate buildings. Under the heading of Liberal Arts are education, literature, engineering, public works, music, and the drama, with government and law, commerce and banking, social, religious, industrial, and coöperative organizations. In the third section are presented models and views of ancient monuments, cities, and habitations; the furniture, clothing, implements, and weapons of aboriginal races; inventions, and statues and portraits of inventors; objects which illustrate progress in the conditions of life and labor, with many additional classes and countless subdivisions grouped on floor and gallery; for within these walls are represented thirty-eight nationalities, including nearly all the great nations of Europe, Asia, and America, with many of their dependencies.

Education is a strong feature in the department of Liberal Arts, the exhibits of the university of California occupying the entire northern gallery, and including the display of the Lick observatory at Mount Hamilton. Colleges and schools both private and denominational are freely represented, while from the East, Harvard, Yale, and the Johns Hopkins university contribute much that is of interest. Libraries have also their place,



THE BANCROFT LIBRARY

and in this connection may be mentioned the one from which were collated the materials for my historical and biographical works exhibited at the Fair, together with most of the historical matter inserted in the story of the Columbian Exposition, so far at least as it relates to the Pacific coast.

The Bancroft library is of its kind probably the most unique collection extant. It consists of some 60,000 books, maps, and manuscripts relating in whole or in part to the affairs of western North America, social, industrial, and political. Among them are found in richest abundance details of the discovery of the several parts of this vast domain, equivalent in area to one twelfth of the earth's surface, and the settlement and early occupation of the same. The exuberant and varied resources of this region, which embraces all the latitudes and climates of the northern hemisphere, can here be traced as in an open book; agricultural and mineral lands, their possibilities and yield; what commerce and manufactures have done; favorable and adverse influences of combined capital and combined labor; influence of the several religions and also of secret and other societies; the organization and evolution of governments and political science; in short, there is in this library ample material for the study of man, aboriginal and civilized, in all the requirements and conditions of life.

Nearly half a century of time and over half a million of dollars were consumed in making this collection. First, all the nooks and corners of North and Central and South America and the West India islands were searched for whatever had been written or printed therein, and whatever related to them which had been elsewhere published. Then Europe was several times visited in like manner; and in numberless instances where the desired books and manuscripts could not be purchased, copies were made. Work of this kind was done in all the great libraries of England, France, and Germany, of Italy and Spain. Everything in St Petersburg relating to Alaska was translated and copied, the archives of Alaska, which were sent from Sitka to the office of the secretary of state in Washington, being transcribed as needed in full or in part by able translators and collators. In the libraries of the British museum, the London Geographical society, and others in England was found much rich material on the history of the Northwest coast during the fur-hunting epoch and the subsequent settlement of British Columbia and Oregon by English-speaking people. The archives of Spain and Mexico supplied masses of historic data relating to the conquest and occupation of Spanish America, while chronicles of the doings of Anglo-Americans on the western slope were secured in the older settled sections of the eastern side.



ADMINISTRATION BUILDING

When all that could be purchased on the subject—that is to say the history of western North America—was thus brought together from every quarter, and all desirable material that could not be purchased had been copied at a labor and expense never before approximated in the forming of great libraries, there still remained many historical gaps which could not be filled from any existing source. Then was devised a plan for gathering still further historical data relating to the early affairs of the several commonwealths, such as never before has been applied to any extensive effort of the kind. Corps of literary laborers, under competent leadership, were sent out in various directions to obtain and write from the mouths of living witnesses their own experiences. All the more prominent pioneers, and those who had taken an important part in making history were thus visited, and what they had seen and done was placed in imperishable form.

Hundreds of original manuscripts, of priceless value and of the utmost importance, were thus brought into existence and made a part of the Bancroft library. Among them were the narratives of the Hudson's Bay company's chief factors and chief traders; of Alaskan officials under Russian régime; of the trappers and traders of the northwestern interior; the adventurous missionaries and overland emigrants to Oregon and California during the forties, before gold in the Sierra foothills was thought of; the padres and mission-builders who came from Mexico and Lower California, leaving a line of Franciscan missionary stations from San Diego to San



THE PALACE OF FINE ARTS



AMONG THE STATUARY GROUPS

Francisco bay; the old Spanish families long resident in San Diego, Los Angeles, and Santa Barbara; Marshall, Sutter, and the great gold discovery which revolutionized the financial world; the miners, the great agriculturists, and the railroad builders; the merchants, bankers, and manufacturers, with scores of others who contributed of their experiences to the general storehouse of knowledge in the form of manuscript histories or of shorter dictations.

Years of time and scores of secretaries were occupied in this work, during the progress of which Alaska was twice visited, and half a dozen journeys made to Mexico, with repeated tours of the entire territory to be covered. From the mission and family archives of southern California many thousands of important original papers and documents were secured, arranged, and bound in bulky quartos. Wagon loads of costly books and manuscripts were acquired at public and private sales of libraries, such as the Andrade collection destined for Maximilian's Imperial library of Mexico, but which at his death was shipped to Europe. Then there were the Pinart collection, the Ramirez collection, the Squier library, and fifty others. Of the 300 volumes of San



A GALLERY OF OIL PAINTINGS

Francisco mission archives, consisting of papers relating to Mexican land grants, gathered from all the pueblos and missions of California into the United States surveyor-general's office, there to be used in the adjudication of claims, an abstract was made, occupying a dozen Spanish copyists. The archiepiscopal archives were transcribed in like manner, this long, tedious, and expensive method being the only way in which the historical data contained in these invaluable collections could be brought into and made part of the Bancroft library.

A hundred like incidents illustrating the ways and means of this ingathering might be presented; but with the facts here given the reader is able to comprehend what otherwise might seem to him an exaggeration; namely, that this library is the largest collection of books and manuscripts in the world bearing on a single topic, if we may consider the history of a given area as a topic; that it is the largest collection of American history in the world; that no state or nation now in existence, or which ever had existence, has or ever can have as full and complete data concerning its early history as this collection gives to western North America; that with easily obtainable eastern data added, and the collection kept up in the future as it has been in the past, it is not possible for any individual state or nation, no matter at what expenditure of time and money, to create another library of American history which shall equal or even approach it, for the obvious

reason that, were the men and means at hand, the time has passed when it is possible to accomplish the pioneer work which gives to this one its exceptional value.

By the artificer of the Manufactures building was also designed the hall of Administration, which, as at the Columbian Exposition, is considered one of the architectural gems of the Fair. It is of moderate size and of graceful proportions, its light and symmetric outlines accentuated by a spacious dome surmounting a central rotunda, and with pavilions at each of the corners, broad stairways and terraces giving further emphasis to this chaste and dignified composition. In style it is oriental, the body of the structure resembling somewhat an Indian pagoda, while in the main entrance, deeply vaulted, and in the mural decorations are traces of Moorish treatment. The interior of the dome is handsomely decorated, and on the outer surface are figures in relief, the light which streams from the tall windows beneath imparting a cathedral-like effect. Within are no exhibits, the various chambers being occupied by the managers, the foreign department, the bureau of information, and as headquarters for the press.



A SECTION OF THE HORTICULTURAL AND AGRICULTURAL BUILDING

The palace of Fine Arts, erected by C. C. McDougall, with John A. Stanton in charge of its contents, is a modest structure of Egyptian type, constructed of brick and stone and intended as a permanent edifice. The exterior is adorned with palm and lotus leaves, with Egyptian and Assyrian deities carved in low relief, and the friezes are richly ornamented, the decorative scheme being fully in keeping with the architectural design. Set back some forty feet from the roadway and slightly raised above its level, the effect is further increased by a spacious vestibule guarded by sphinxes, and with floor of mosaic laid in Egyptian figures. Flanking the portico are massive columns supporting a gallery, whence pillars extend to the entablature, above which is a triangular crown. The interior is in keeping with the external aspect, the friezes, wainscotings, and staircases grotesque with conventional emblems, with heads of beast and bird. While to the building as a building no exception can be taken, an exhibition of modern art would appear somewhat out of place in this Egyptian temple, with its pyramidal roof and walls as yellow as the sands of Nile.

In the central hall is most of the statuary, the chambers adjoining being mainly devoted to water colors, and the oil paintings contained in the five compartments of the annex. All branches of art are included in the display and among the works are many from artists of repute in all the principal nations represented at the Columbian Exposition, some of them still alive and some who live only in their canvases. Corot and Daubigny are here, with Jules Dupré, Troyon, Henner, and Claude Monet. Of the Russian school there are Makovsky and others, and from Poland comes almost intact the collection of the society of Polish artists. England, and Canada, Italy, Spain, and Germany also find expression in these galleries. Of American painters there are several who rank among the great masters of their craft, while of the California display it need only be said that it is the best exhibition of local art ever gathered in a single collection.

Horticulture and agriculture are prominent features at the Midwinter Fair, and in these departments are also included dairying, forestry, fisheries, fish products, and pisciculture, with other branches for which no separate structures were provided. For the housing of the various collections a single roomy edifice, designed by Samuel Newsom, with Emory E. Smith as chief of department, was erected in the style of architecture characteristic of the pastoral era, with low, massive walls of dull yellow tint, deeply arched entrances, and shady porticos inviting to repose. A glass covered dome 100 feet in diameter surmounts the central rotunda, and around it are smaller domes, with towers above the principal entrance and over the eastern end. The decorations of the building are more suggestive of its purposes than the building itself; for though an excellent combination of mission architecture, it is filled with products such as were never raised on California soil until long after the missionary era.



MECHANICAL ARTS BUILDING

In the centre of the rotunda is a striking display of fruits from Fresno county, arranged in architectural forms and surrounded by agricultural groups from other counties. In a court adjoining is a classified array of vegetables, with a Ferris wheel constructed of oranges, and in adjacent sections are exhibits of tobacco, of California, Spanish, and Portuguese wines, and of malt and spirituous liquors. Here also are beef extracts and other food products, while from the San Francisco produce exchange comes a choice display of grain. In the southwest wing is a large assortment of dressed meats and agricultural implements, beyond which is a model fish hatchery from Mendocino county. The main floor is covered with avenues of booths and pavilions, interspersed with trees and flowering plants, each exhibitor striving to surpass all others in beauty of design and decoration. On the floors above is an endless display of fruits and flowers and forest growth, including the collections of the state boards of horticulture and sericulture. Here is the most attractive portion of the building, and perhaps of the Fair; for in these galleries the interblending of foliage with floral effects, of stately palms, of ferns and vines and broad-leafed plants, gives to them the aspect, perfume, and color of a spacious and richly stocked conservatory.

The hall of Mechanical Arts, with Edmund R. Swain as its artificer, is fashioned so far as conditions would permit in the style of an Indian temple, its external aspect in contrast with the whirl of machinery, the models of railroads and steamboats, and the electric appliances contained within; nor is the effect improved by the boiler-house in rear, with the smokestacks of its furnaces in close proximity to lofty pinnacles, prayer-towers, and gilded kiosks. Nevertheless it is a pleasing composition, well conceived and skilfully worked out to completion. Its most striking feature is the richly colored entrance-way, in the form of a pavilion with pyramidal roof, and flanked with stately minarets. At the corners are large octagonal towers, the spaces between them and the main portal being pierced with arched openings and the whole exterior aglow with tasteful ornamentation.

Subject to the direction of A. M. Hunt, as chief of department, the groups were classified and arranged under the divisions of machinery; mines, mining, and metallurgy; transportation, railways, vessels, and vehicles; electricity and electrical appliances. In the centre of the main floor, surrounded by a circle of pumps, are two large tanks, into one of which are discharged the waters of a miniature cataract, illumined at night by electric lights. At the southern end are the engines and dynamos which furnish light and power to the buildings; in the western and northeast sections is the lighter machinery, and to the right of the main entrance are the electrical exhibits, including that of the General Electric company, near which is the display of Germany and

France, and across the aisle that of Great Britain. The mining exhibits of California, arranged by counties, occupy a large portion of the main floor, and here is a most elaborate display of the mineral wealth of the state, the list including 35 varieties, of some of which there are countless specimens. In the centre is a large gilded globe resting on a pedestal upheld by granite columns and surmounted by a grizzly bear. In this sphere is illustrated California's total yield of gold, and if made of that metal it would represent a value of $1,300,000,000.

On a commanding location near the Horticultural building is the home of Southern California, approached from the central court through an avenue lined with orange and palm trees. Erected by the Southern California Midwinter Fair association for the use of several counties, its contents are worthy of what has been termed the Mediterranean region of the Pacific coast, where are raised nearly all the products of Italy, Greece, and Spain. In the centre of the main floor are the exhibits of Los Angeles county, a feature in which is an oriental arch built of oranges and surmounted by an elephant, life-size and fashioned of walnuts. In rear of this is a walnut tower that did duty at the Columbian Exposition, a ton of nuts being used in its construction. On the left is a mammoth ear of corn covered with 45 bushels of grain in the cob; in the foreground is a pyramid of oranges from Pasadena, and behind it a tower of olive oil from Pomona, with tables between these structural groups on which are arranged the citrus fruits of other sections. Dried fruits are also grouped in artistic designs; from prominent vintners and viticulturists come 1,000 bottles of wine, and there is a model farm with orange grove and field of alfalfa, illustrating old fashioned and modern methods of irrigation.

Ventura county has a pagoda of beans in 83 varieties, with a choice array of fruits, almonds, and honey. The exhibits of San Bernardino and Riverside are in keeping with their reputation as among the great citrus belts of the state, the former having also wheat and wine with beet sugar from the Chico factory and mineral specimens from scores of mines, while Riverside, in addition to her Ferris wheel and pyramid of oranges, has peaches, prunes, and apricots, appearing to the best advantage during the term of the Southern citrus fair, opened in this building on the 20th of February. San Diego has her Silver Gate warehouse composed of many varieties of dried fruits and grains, with cereals in sheaf and windows of honey, jellies, and wines. The archway is handsomely decorated in seeds and grains; there are columns of olive oil and lemons, and near by is an abundance of citrus fruits, the interior walls being hung with pampas plumes, photographs, and paintings in oil. There is also a display of mounted animals and birds, and of food fish more than 100 descriptions. In



THE HOME OF SOUTHERN CALIFORNIA

the gallery of the main building are a woman's department and an art exhibit, with parlors, offices, an assembly hall, and committee and reading rooms.

Northern and Central California erected for the housing of their collective exhibits a commodious structure near the Administration building, of no special order of architecture and intended for utility rather than display. The interior is richly decorated with floral embellishments, its contents consisting largely of fruits, grains, and minerals, a feature in which is the exhibit of the Northern citrus fair in competition with that of Southern California. Oranges by tens of thousands are arranged in attractive forms, with other fruits, green, dried, canned, and bottled, and with choice assortments of vegetables. Cereals are also grouped in many devices; in a figure of Ceres, in the form of a woman, and in the shape of a gigantic ear composed of many thousands of ears. And so with wine, of which there is a mammoth bottle fashioned of several hundred bottles, while one of the counties has a fountain flowing with wine. Of manufactures there are excellent samples, and in a word all the leading industries and resources of California, north of the Golden Gate, are here represented; but as these exhibits are culled from eleven counties, they cannot be described in detail.



LOS ANGELES COUNTY IN THE SOUTHERN CALIFORNIA BUILDING

Several of the counties erected pavilions of their own, first among which may be mentioned that of Alameda, a handsome structure of oriental design and appearing to excellent advantage on its prominent site to the south of the Administration building. In front of the main entrance is a garden of semi-tropical plants; from the gallery is access to a roof garden, and the exhibiting space in the central court is well stocked with the productions of one of the most favored sections of California. Santa Clara displays her wealth of fruits and other products in a neat, rectangular edifice, its towers draped with flags and its cream-white color in contrast with the surrounding foliage. San Mateo's building is of the mission order, and its contents in keeping with the reputation of that county as a horticultural district. San Joaquin has a tasteful pavilion of cruciform shape, its central dome encircled with a balcony and capped with a graceful cupola. Worthy of note are the floral decorations of its interior, and especially of the main aisle, which is one mass of flowers and plants. Manufactures are the principal feature in the exhibits, though the products of farm, orchard, and vineyard are well represented. Monterey, whose history antedates the landing of the pilgrim fathers, finds expression in one of the quaint farm buildings of a century ago, where, in addition to the fruits of the soil, are relics of mission days. In Santa Barbara's pyramidal structure olives and olive oil are among the principal groups, and in the centre is reproduced the obelisk, framed of oranges, which attracted so much attention at the Columbian Fair. Humboldt erected



ANOTHER SECTION OF THE BUILDING

an unpretentious edifice constructed entirely of native woods and stocked with lumber, grain, and fruits. Tulare has, in place of a separate building, a model irrigated farm with growing crops, forming a unique and novel feature among the county exhibits.

The states adjoining California on the north and east have also their separate buildings at the Fair, others being represented chiefly in the main departments. Oregon has a handsome structure in the most populous part of the grounds, well stored with exhibits which, except for semi-tropical fruits, include nearly all the classes displayed by California. Prominence is given to manufactures, in which Oregon rivals her southern sister, though here is sufficient proof, if proof were needed, of her wondrous fertility of soil. Nevada has an edifice of the mission order, the contents of which at once dispel the popular illusion that silver and sagebrush are the principal products of the state. For the first time, outside her own boundaries, Nevada has given adequate expression to her resources, showing that she is rich in the yield of her farms as well as in that of her mines. There are deciduous fruits of many varieties and of excellent quality, while from the floral decorations it will be seen that California is not the only clime "where the Junes and Decembers meet."

Foreign residents of California have shown their interest in the Fair by erecting structures characteristic of their native land. As headquarters for British visitors was built, near the home of San Joaquin county,



THE NORTHERN AND CENTRAL CALIFORNIA BUILDING

"Anne Hathaway's cottage," with thatched roof, projecting gables, and the tiniest of windows, all as in the original at Stratford-on-Avon. It is a quaint and restful piece of architecture, and not inappropriate to the part which it plays at an international exposition; for Shakespeare belongs not to England alone but to all the world. Nestling among the trees and in neighborly proximity is the Canadian domicile, resembling an old-fashioned country house, comfortably furnished and tastefully decorated, its walls hung with portraits of statesmen and with paintings, etchings, and engravings of picturesque and historic scenes. To Servia, Roumania, and Montenegro belongs the largest and most ornate of the national pavilions, with features adopted from the public buildings of all the three, and with strong traces of Russian treatment. The Italian edifice is of classic architecture, a simple structure but handsome in its simplicity, and mainly used for purposes of recreation, for music, dancing, and other pastimes in which Italians delight.



ALAMEDA COUNTY'S PAVILION

In this connection may be mentioned Festival hall, at the western extremity of the grounds, intended for amusements and public gatherings, and with recreation grounds adjacent. It is a rectangular building, with spacious arches and stairways, flat-roofed and surmounted by a glass-covered superstructure. On the main floor is an assembly hall which, with its surrounding galleries, affords seating capacity for 6,000 persons, the stage being 60 feet wide and flanked with tiers of boxes. Elsewhere are the offices of the management, with accommodation for the concessionaires and for the Midwinter Fair guards. Here concerts and other entertainments are given, and by Sousa's, the Iowa, and Exposition bands are open air concerts, the latter held during inclement weather in the Manufactures or Horticultural buildings. Here also it was at first intended to hold the sessions of the various congresses assembled in the city of San Francisco, the subjects considered including politics, economics, labor, finance, religion, temperance, education, literature, art, and music.

There is no Midway plaisance at the Fair; but scattered throughout the grounds are many things which remind us of this inviting feature in the Columbian Exposition, while of both expositions it may be said that to their supplementary attractions, their Midway spectacles, their music, fireworks, illuminations, and special days of festivity and celebration, was due at least two thirds of the total attendance. At the former there are outside exhibits which found no place at Jackson park, and among the most interesting is the mining camp of '49. It is a typical camp of the olden days, with its row of shanties on either side of the street, its stores, stage office, and hotel, its dance hall, saloon, and gambling resort, with all the adjuncts of pioneer civilization, but with neither church nor school-house. In these days there were no children in California, and as for divine service, it was conducted at times in the saloon, with results much more satisfactory, so far as the collection was concerned, than at the fashionable sanctuary of modern times. Other distinctive features are the Oregon hydraulic mining exhibit and the Colorado gold mine, the latter reproducing in miniature the workings of the Saratoga mine in Gilpin county.

The Chinatown of the Midwinter Fair includes a temple or Joss house, a theatre with its endless performances, a tea house where the beverage is served



WINE PRESS STATUE



IN THE SAN MATEO COUNTY BUILDING

with sweetmeats on square ebony tables, a court redolent with the oppressive odors of Chinese plants, and a number of booths where are gilded carvings, silk-embroidered robes, furniture inlaid with mother-of-pearl, and other manufactures of wondrous design and workmanship. On the opposite side of the central court, enclosed with a bamboo fence, is the Japanese village, with its theatre, acrobats, and dancing girls, its restaurant and tea house, its lake and waterfall and landscape garden. The street in Cairo is here, complete in every detail, though differing in many respects from the one in Jackson park and from the Rue du Caire at Paris in 1889. Within the principal entrance is a bazaar with more than three score booths aglow with jewelled weapons, filigree work, and fabrics warm of hue. Near by are a Turkish café with luxurious appointments, and a restaurant where are served all manner of dishes on tables placed beneath the trees. There are mosques with fantastic domes and stately spires and minarets; there are two theatres, in one of which are performed the sword dance and the repulsive danse du ventre; there are the familiar groups of Arabs, Egyptians, Soudanese, and Nubians; there are camels, donkeys, and donkey boys, and finally there is the wedding procession, resembling the one already described in these pages. In the Hawaiian village, in addition to the cyclorama of the volcano of Kilauea, as represented at the Columbian Exposition, are the throne and uniform of the late king of Hawaii, with the furniture and equipments of his palace, relics of by-gone days, and many forms of native manufacture. Islanders in white flannel suits and island lasses in gay apparel are chatting and sauntering around the plaza, and in front of primitive huts of plaited grass and ferns stalks the gigantic ox "Apalahama," astride of which is a woman with bifurcated skirt of spotted calico. Ceylon has a court and tea garden transplanted from the Chicago Fair, as was also the Dahomean settlement. In the Eskimo village is shown how the natives of Labrador, men, women, children, and dogs, live in their hyperborean clime in cone-shaped huts of snow, so far at least as the effect can be produced by liberal coatings of whitewash. In contrast with this is the Arizona village, whose denizens are skilled in simple forms of manufacture, as in the making of baskets from native grasses so closely woven as to hold water, and in the weaving of blankets on the most antiquated looms, yet rich in color and extremely durable. Their cabins are of mesa grass, with sloping roofs and long gourd chimneys in the shape of an inverted tripod. In another Indian village—that of Doctor White Cloud—are Sioux warriors and squaws, among them several who took part in the battle on the Rosebud, where Custer met his fate.

Europe is also represented in the Midway features of the Fair. There is a German village in which Heidelberg castle, with its store of ancient weapons, pictures, and furniture, looms above peaked and gable-roofed cottages nestling around its base. There are old-fashioned German shops; there are skittles and ten pins, with fun and frolic in every form, and there is the inn of "The Golden Bear," where he who is so inclined may enjoy his beer and pipe in company with the broad-girthed citizens of the Fatherland. Covering some two acres near the Manufactures building is the prater or park, with its shady avenues, fountains, and flower-beds, a miniature reproduction of the site on which was held the Vienna Exposition of 1873. In the concert hall are performances conducted by the musical director of the imperial court of Austria, and on special nights are garden fêtes and other entertaiments. A further attraction is the plaintive music of the gypsy chorus in the Hungarian csarda or inn, noted for its excellent wines and repasts.

On the route of the Scenic railway are shifting glimpses of scenery, the line passing through a natural cavern, the walls of which are illuminated with flashes of electric light in various colors. The Firth wheel is to the Midwinter what the Ferris wheel was to the Columbian Exposition, but on a smaller scale, and, as is claimed, with certain improvements in mechanical device. The foundation for the piers is formed of more than 700 tons of rock and cement, and the supports and bearings are capable of withstanding a much greater strain



SUGGESTIONS OF THE MIDWAY PLAISANCE

than any to which they are subjected. The wheel is 100 feet in diameter and 50 additional feet are gained by the height of the foundation and the natural elevation of the site. From the windows of the 16 cars, each holding ten persons, is a kaleidoscopic view of the Fair, and of surpassing beauty is the effect by night when buildings and grounds stand forth in tracery of fire.

In the illumination of the Fair the electric tower is the principal feature; for here is one of the most powerful search-lights in the world, its comet-like rays distinctly visible more than 50 miles at sea. Soon after nightfall the electric fountain begins to play; at a given signal the lamps are extinguished, and an instant later the flash of the search-light is turned on the gilded dome of the Administration building, which hangs like a ball of gold suspended in air, its apparent height increased by the darkness which enshrouds the structure beneath. Then in succession the rays are turned on the pinnacles, towers, and façades of each of the principal edifices, or sweeping the horizon, cast their sheen afar on the waters of the Pacific. Presently the arc and

incandescent lamps are relighted, accentuating as with meridian splendor the graceful proportions of the buildings grouped like enchanted palaces around the central court.

And here in her dazzling robes of light we will take our leave of the Sunset City, the City of Palms, the Midwinter Fair. While other international expositions have been the outcome of years of preparation at a cost running far into the millions, here was what may be termed an impromptu display of what California could do on the briefest notice and with the smallest possible means. Most creditable were the results achieved, and the more so that nothing better than county or local fairs had thus far been attempted. Moreover it was a season of financial straitness; there was no government, state, or other public aid, and by capitalists the project was at first declared to be neither practicable nor desirable. As to the benefits of the Fair, its educational and commercial benefits, its benefits as an advertising medium, an efficacious and dignified advertisement, inviting to the Pacific coast the class of immigration which it needs, as uniting all sections of the coast in fraternal sympathy and friendly coöperation, as bringing them into closer relations with foreign lands and with other portions of their own land, these are influences which cannot as yet be estimated. A quarter of a century hence, let us say, when at San Francisco or Portland a great international exposition shall be held amid one of the most cultured and prosperous communities in the world, men may look back to the gathering in Golden Gate park in this year of 1894 as the inauguration of an era such as never before was witnessed by the young and ambitious commonwealths of the further west.



ONE OF THE MIDWAY ATTRACTIONS

Midwinter Fair Miscellany.—In all respects save one the Midwinter Fair was a success, and that was from a financial point of view, though gate and other receipts were fully as large as had been expected. With the comparatively small amount subscribed in sums ranging from $1 to several thousands of dollars, the results accomplished were most remarkable, the entire cost of buildings, grounds, and operating and other expenses being less than that of the hall of Manufactures and Liberal Arts at the Columbian Exposition. The largest buildings were erected in a very few months, and others in a few weeks, a few days sufficing for the construction of the smaller edifices. The attendance suffered from business depression and inclement weather during a portion of the term; but all who visited the Fair were pleased, and those who came from afar were surprised at this exhibition of the manifold resources and industries of the Pacific coast, for the first time grouped in combination and on an adequate scale.

Festivities and celebrations were as numerous at the Midwinter as at the Columbian Exposition, nearly every day of its term, Sundays of course excepted, being set apart for some state, county, nationality, or organization, or in honor of some historical event. In connection with the Fair was an emergency hospital, with physicians in attendance day and night, and an ambulance service fully equipped and always in readiness. The Midwinter Fair guard was enrolled as a special police force under military discipline, and organized by Colonel W. R. Shafter of the regular army.

Worthy of note among the incidents of the Midwinter Fair is the so-called "battle of roses," in which many counties participated, Alameda being especially prominent. A procession made the tour of the grounds, and there were floats covered with roses and carriages and horses decked with roses, all passing beneath arches wreathed with roses, erected at various points.

Among other Midway attractions not mentioned in the text is Boone's wild animal arena, where a lion standing in a chariot, with reins between his teeth, is drawn around the ring by a pair of tigers; a wolf is made to jump through a hoop, and goats, pigs, dogs, and cats are trained to their several tricks. In the Santa Barbara amphibion sea-lions and sea-otter are kept in a huge salt-water tank, whence they climb the steps and come floundering on the floor for the fish which their keeper offers. There is an ostrich farm or paddock in which it may be seen how a prominent industry of Southern Africa can be turned to advantage in California, where experiments have thus far proved unprofitable. Housed in a handsome pavilion is a group of St Bernard dogs, with 35 noble specimens from the Waldenberg kennels near Basle, one of them valued at $20,000. In the Electric theatre is shown how electricity can be used for scenic effects. A weird exhibition is the Inferno, entered between the jaws of a dragon's head, with its burning lakes, its bottomless pits, and other suggestions of an imaginary place of torment. In the Moorish mystic maze the visitor enters a series of narrow corridors walled with mirrors so placed as to produce countless reflections of himself and to transform an individual into a ghostly multitude. The effect is bewildering as well as ludicrous; for once within there is no apparent outlet, and nothing to be seen except for the figure of a woman illusive as a desert mirage. Other attractions are the "haunted swing" and a clever illusion in "Egyptian hall," where a marble statue of Pharaoh's daughter, perfectly modelled and draped, is gradually transformed into a living woman, who descending from her pedestal gives assurance to the audience that she is alive.

INDEX

NOTE.—As other world's fairs are briefly described in these pages, apart from that which forms the subject proper of the work, it will be understood that when not otherwise stated or inferred, the index references relate to the Columbian Exposition. The index has been prepared with a view to enable the subscriber to turn in a moment to anything he wishes to read. Thus if he would know what the city of Boston, the state of Colorado, or the empire of Germany has sent to the Fair, he will find reference made under the headings of "Boston," "Colorado," and "Germany," to all their more important exhibits. If he would refer to some section in one of the main divisions, as in the Agricultural or Fine Arts departments, he will find the exhibits classified by nationalities under "Agriculture" and "Fine Arts." And so with exhibitors and that which they exhibit, mention being made of individuals, associations, and groups or articles, with cross references covering the entire Exposition as described in *The Book of the Fair*. The names of exhibiting artists and of those who took part in the Congress Auxiliary are omitted, as they are several thousand in number.

A

Abbey & Imbrie, exhibit of fishing-rods, 124, 134.
Aberdeen, Lady, on English committee, 72; Irish village, 836–7.
Aberdeen, Lord, visit etc. of, 971.
Ackerman, W. K., financial report, 959.
Acme Cement Plaster Company, 508.
Adams Express Company, 840.
Adams & Westlake Company, railroad supplies etc. 569.
Adler & Sullivan, architects of Transportation building, 544.
Administration Department building and uses, 59, 129–33; functions and branches, 133; Midwinter Fair, 983.
Aërial Navigation Congress, 942.
Africa, commerce and fairs of, 6.
African Congress, 944–6.
Agassiz Association, exhibits in natural history, 651.
Agra, exposition at, 1867, 27.
Agricultural Colleges and Experiment Stations, U. S. collective exhibits, 361–2; Canadian exhibits, 364.
Agricultural Congresses, 953–5.
Agricultural Department, building, decorations, distribution of space, etc., 58, 341–3; scope and arrangements of exhibits, 343–4; 347; U. S. display, 347–62; British, 362–5; Canadian, 365; Australian, 365–7; Cape Colony, 367–8; Cingalese, 368; French, 368–71; Algerian, 371; German, 371–2; Austrian, 371–2; Russian, 372–3; Grecian, 373; Dutch, 375; Swedish, 375; Danish, 375; Spanish, 375; Porto Rican, 375; Trinidad, 375; Cuban, 376; Mexican, 376; Brazilian, 376; Argentinian, 376; Paraguay, 376–7; Ecuador, 377; Urugnay, 377; Japanese, 377–8; Curacoa, 378; British Guiana, 378–9; Johore, 379; Persian, 379–81; Liberian, 381; Orange Free State, 382; Siam, 382; Dairy building, products, and tests, 391–7; Midwinter Fair, 983–4.
Agricultural Implements, U. S. exhibit, 120–1, 383–7; Canadian, 365; Cingalese, 368.
Agriculture, government exhibit, 125–6, 134–5; condition, yield, etc., U. S. 344–7.
Alabaster, Italian exhibit of, 495.
Alameda County, exhibit, Cal. building, 833; at Midwinter Fair, 986.
Alaska, collection from, 123; ethnological exhibits, 640, 663.
Albro Company, exhibit of woods, 456.
Alexander, Duke, visit etc. of, 971.
Alger, R. A., at Mich. dedication day, 833.
Algeria, exhibits in Agricultural department, 371.
Algerian and Tunisian Village, 876–7.
Allis–Corliss Engine, description of, 311, 40.
Alloway, R., exhibit of horses etc., 616.
Altgeld, Gov., at Penn. day, 777.
Aluminium, exhibits, 504–5.
"American Angler," collection of paintings, 540.
American Bankers' Association, convention of, 930–2.
American Bell Telephone Company, pavilion and exhibits, 411–13.
American Bible Society, exhibit, 254.
American Bronze Company, exhibits, 169.
American Cotton Oil Company, exhibit, 382–3.
American Express Company, premium for wagons, 624.
American Jersey Cattle Club, dairy stock, 395–6.
American Net Twine Company, exhibit, 515.
American Steam Barge Company, exhibit etc., 603.
Amesbury, Mass. exhibit of vehicles.
Amsden, C. H., at N. H. dedication day, 786.
Amsterdam, expositions at, 19-20; chocolate house, 375.
Andersen, Hans C., relics, 213.
Anderson, A. D., Exposition plans of, 37.
Andrews, A., director of Midwinter Fair, 976.
Andrews, E. B., speech, R. I. day, 782.
Angling apparatus, exhibit of, 513, 528, 540–1.
Angora Goats, exhibits etc. of, 621.
"Anne Hathaway's Cottage" at Midwinter Fair, 987.
Anschuetz, O., exhibit of tachyscopes, 863.
Ansonia Clock Company, exhibits, 156, 423.
Anthropological and Ethnological Department, divisions, plan and purpose, 629–33; Grecian statuary and sculptures, 633; Mexican exhibits, 634; U. S. 634–5, 640–53; Canadian, 635; Central American, 636; Peruvian, 636; Ecuador, 637; Brazilian, 637, 651–3; Costa Rican, 637; British Guiana, 637–8; Paraguay, 637–9; New Zealand, 639; New South Wales, 639; New Caledonia, 639; collections in La Rabida, monastery, 655–62; from Hindostan, 662–3.
Antimony, exhibits of, 485, 492–3, 496, 504.
Antonio, Prince, visit of, 971.
Apollo Club, concerts, 967.
Appleton & Co., exhibit of, 254.
Aquaria, description of, 513–15.
Aquatic Plants, display of, 434.
Arabia, fairs of, 6–7.
Arbitration and Peace Congress, 943–4.
Arc Lamps and Lighting Apparatus, Thomson-Houston, 406; German, 414.
Architectural Congress, 942–3.
Architecture, U. S. designs, 689–90; French, 696–7, 709; British, 727; German, 729, 733.
Argentine Republic, participation in naval review, 93–4, 98; exhibits of manufactures, 217; agricultural, 376; forest products etc. 463; minerals, 497.
Arizona, forest products, 456; mining, 487; territorial building and exhibits, 832; village at Midwinter Fair, 989.
Arkansas, fruit exhibits, 442; mining, 477; state building and exhibits, 795–6.
Arkell, P., exhibit of sheep, etc. 623.
Armour & Co., exhibits in Agricultural department, 382.
Armour, G., president of Chicago Art institute, 35.
Armstrong, Mitchell & Co., model of the "Victoria," etc. 593–4.
Art Congress, 942–3.
Art Metal Work, British exhibits, 182–4; Hindostan, 186; German, 197–8; Austrian, 203; Norwegian, 211–3; Japanese, 222–3; Swedish, 905.
Art Needle-work, exhibits in Woman's department, 289–90.
Art Students' League, N. Y. exhibit of, 255–6.
Astronomical Congress, 947.
Atchison, Topeka, & Santa Fé Railroad, exhibit of, 570.
Athens, exhibition at, 1859, 20.
Atlantic Transport Line, models of the, 595.
Atwood, C. B., architect of Art building, etc. 65, 451, 668.
Australia, horticultural and forestry exhibits, 430–4, 452; wines, 438; fruits, 439–40, 443; forest products, 460–1; fishing industries and exhibits, 532–4; fine arts, 728–9, 800.
Australia House, its contents and design, 900–1.
Austria, fairs and exposition in, 18–19; exhibits of manufactures, 201–7; liberal arts, 231, 250, woman's department, 282; machinery, 338; agricultural, 371–2; electrical, 416, 422; wines, 438; mining, 495; railroad exhibits, 568; fine arts, 733–5.
Austrian Village, 871–3.
Awards, 83, 628, 964–5.

B

Badlam, A., treasurer of Midwinter Fair, 976.
Bailey, C. P., premiums awarded to, 621.
Baird, Professor, his classification of exhibits, etc. 107.
Baker, A. C., superintendent of marine division, etc. 604–5.
Baker, Sir B., his model of railroad bridge, 564.
Baker, W. T., a promoter of the Columbian Exposition, 41, 46–7.
Balke-Collender Company, exhibits, 163.
Ball, Mrs. J. F., lady manager, etc. 800.
Baldwin Locomotive Works, engines, 551–2, 561.
Ballinasloe, fairs at, 8.
Baltimore & Ohio Railroad, exhibits, etc. 547–51.
Bancroft Library, description of the, 980–3.
Banjos, exhibits of, 231.
Barber Asphalt Company, exhibit, 508.
Barbour, Mrs., concerts arranged by, 967.
Barcelona, exhibits in Manufactures department, 215.
Barnes, Grand Chancellor, Knights of Pythias celebration, 970.
Barnes, W. H. L., connection with Midwinter Fair, 976.
Bates, Mary C., decorator, California building, 833.
Bavaria, manufactures exhibits, 198–200; German village, 858.
Bay City Industrial Works, exhibit, 604.
Beale, Mrs. L. P., member of Va. board, 800.
Bean, T. H., manager of fisheries section, 134.
Beaucaire, fairs at, 13.
Beauvais Tapestries, exhibits of, 188.
Beck, J. M., speech on Pa. day, 777.
Bedouin Camp, 877, 880.
Beer, Ale, Porter, etc. see Liquors, Malt.
Belgium, fairs and expositions in, 19–20; manufactures exhibits, 207–9; liberal arts, 250; woman's department, 282; machinery, 338; horticultural, 434, 447–9; fine arts, 694, 735.
Bell, A. G., first telephone made by, 413.
Beloit Iron Works, exhibit, 323.
Belting, exhibits of, 419.
Beman, S. S., architect of Mines building, 65.
Bengal Chamber of Commerce, exhibit, 901.
Bennett, J. G., founder of commercial cable company, 420.
Bergbau, exhibit in Transportation department, 567.
Bergen, fisheries exhibit, 526–7.
Berlin, exhibition of drawing implements at, 1870, 18; machinery exhibits, 331–2; electrical, 413–14; mining, 489.
Berlin Museum, relics from, 861.
Berry, F. G., director of Midwinter Fair, 976.
Bethlehem Iron Company, exhibit, 600.
Bicycles, display of, 577–8, 581–2.
Bicycle Electric Cars, exhibit of, 570.
Billiard Tables, exhibit of, 183, 217.
Birkhoff, G., Netherlands day, 919.
Birmingham, exposition at, 8.
Bismarck, mementos of, 888.
Blake, E., speech on Irish day, 895.
Blalock, N. G., Washington day, 828.
Blarney Castle, reproduction of, 838.
Blodgett, E. A., Grand Army day, 969.
Blooker Cocoa Company, exhibit, 397.
Board of Lady Managers, authorized by congress, 42; powers, functions, operations, etc., 69–74; children's home established by, 291, 297; presentation of woman's work, etc. 300–2.
Board of Reference and Control, organization and functions, 45, 69.
Bohemia, manufactures exhibits, 203–5; woman's department, 274; celebration day, 919.
Boies, Gov., speech on Ia. day, 833.
Bolivia, mining exhibits, 497.
Bolton, H. W., odd-fellows' celebration, 969.
Bonet Electric Tower, at Midwinter Fair, 976.
Bonfield, J., chief of Exposition police, 974.
Bonney, C. C., participation in congresses, 70, 922, 925, 927, 930, 932–3, 939, 948, 951, 953, 955.

Boone & Crockett Club, hunter's camp, 449–40.
Boone's Wild Animal Arena, at Midwinter Fair, 992.
Boston, international exposition at, 1883, 27; celebration of Columbian anniversary, 98; exhibits of musical instruments, 232; machinery, 327; electrical apparatus, 418; fisheries, etc, 515–17; bicycles etc, 582; fine arts, 673–4, 678–90; architectural designs, 689.
Bonrquin, A., premiums, 621.
Bovril Company, exhibit, 364.
Boyd, J., Jersey stock, 396.
Bradford Printing-press original of the, 1693, 324.
Bradley, W. O., oration, Ky. dedication day, 793.
Brazil, participation in naval review, 93–4; exhibits of manufactures, 216; woman's department, 282; machinery, 338; agriculture, 376; forest products, 463; minerals; 497; fisheries, 539; transportation, 577; archæology, 637; natural history, 651–3; fine arts, 718, 917–8; government building and contents, 917–8.
Brazilian day, 920.
Brazilian Concert Hall, 880.
Brinton, Mrs., log cabin, etc, 840.
British Building and exhibits, see Victoria House.
British Carriage Manufactures Institute, collection of paintings etc, 578–9.
British Columbia, exhibit of fruits, 443; forest products, 461; minerals, 492; fisheries, 529–32; ethnology, 663.
British Guiana, agricultural exhibits, 378–9; ethnological collection etc, 637–8.
British North Borneo Company, exhibit of tobacco etc, 364.
Bronzes, French, 188–90; German, 200; Austrian, 203; Russian, 209; Argentinian, 217; Mexican, 218; Japanese, 222–3; Italian, 764.
Brookfield Stud Farm, model etc, of 364–5.
Brooks Locomotive Works, exhibit, 561.
Brown, A. P., Midwinter Fair architect, 978.
Brown, Gov. F., speech on R. I. day etc, 782, 792.
Brown, G. E., premiums, 617.
Brown, H. F., exhibit of shorthorns etc, 620.
Brown, J., Kan. day, 833.
Brown, J. Y., Ky. dedication day, 793.
Brussels, expositions at, 20.
Bryan, T. B., a promoter of the Columbian Exposition etc, 39–41, 70, 920, 955.
Buchanan, W. I., chief of Agricultural department etc, 617, 619, 833, 953–4.
Buchanan, Mrs. W. I., model designed by, 277.
Buford, A. S., president Va. board etc, 787, 790.
Bulgaria, exhibits in Manufactures department, 218.
Bulkeley, Gov., dedication parade, 87.
Burdett-Coutts, Baroness, member of English committee etc, 72 73.
Bureau of Public Comfort, operations of the, 81, 85.
Burgess Bros., exhibit of horses etc, 616.
Burke, ex-Gov., N. D. day, 833.
Burleigh, H. C., Me. dedication day, 787.
Burnham, D. H., chief of construction etc, 64–6, 943.
Burrill, T. J., educational exhibit, 805.
Business Colleges, exhibits of, 240.
Bustamante, F. E., Venezuela day, 920.

C

Cable Cars and apparatus, 570–1.
Cacti, display of, 433–4.
Cairo, fairs at, 6.
Cairo Street, Columbian Exposition, 864–8; Midwinter Fair, 989.
Calcutta, exposition at, 27.
California, educational exhibits, 238; woman's department, 263; agriculture, 357–9, 821–2; wines, 435–8; fruits and nuts, 440–1, 445–6; 821–2; forest products, 452, 454, 465; mining, 479–81, 488, 821–2; fisheries, 523–4; live-stock, 621; fine arts, 683, 820 3; state building and exhibits, 819-26; horticulture, 820; relics and curiosities, 824; Cal. day, 833.
California Midwinter Exposition, see Midwinter Exposition.
Camerden & Forster, bronzes, 203.
Campbell, C. T., odd-fellows' celebration, 969.
Campbell, J. L., Ind. dedication, 810.
Campbell Printing-press Manufacturing Company, exhibit, 324.
Canada, manufactures exhibits, 185; educational, 246; woman's department, 276; machinery, 338; agriculture, 365, 383; horticulture, 433–4, 443, 445; forest products, 452, 461; mining, 491–2; fisheries, 529–32, 541; transportation, 564 5, 573, 596; live-stock, 620–1, 624–8; archæology, 634; fine arts, 727–8; government building and contents, 898; Dominion day, 898–900; Midwinter Fair, 987.
Canadian Pacific Railway, exhibit, 564–5.
Cannon etc., see Ordnance.
Cannon, G. Q., Ut. day, 833.
Cape Colony, exhibits in woman's department, 280; agriculture, 367–8; mining, 499–500; transportation, 598.
Cape Town, exposition at, 28.
Captive Balloon, 881.
Caravels, Columbian, at naval review, 98; voyage and description of, 582–3.
Carlisle Indian School, exhibits, etc, 87, 256.
Carlisle, Secretary, banquet to, 97.1
Carriages etc., see Vehicles.
Carson, H. L., at 4th of July celebration, 968.
Carson, W. M., bureau of public comfort, 81.
Catholic Congress, 949.
Catholic Educational Exhibition, 238 9, 968.
Cattle, see Live-stock.
Cayvan, Georgia, Me. dedication day etc, 787, 882, 922.
Census Bureau, exhibits, 119.
Centennial Exposition, description of, 34–7.
Central America, fairs in, 23; ancient sculptures, 636.
Central California, exhibits at Midwinter Fair, 986.
Century Company, exhibit, 253.
Ceramic Wares, U. S. exhibit, 169; British, 179–82; French, 191; German, 197 200; Austrian, 203–5; Belgian, 207; Danish, 213; Italian, 215; Spanish, 215; Brazilian, 216; Chinese, 220–1; Japanese, 222–3.
Cereals, production and exhibits of, U. S. 345–61, 388, 801–3, 821–2; British, 362–3; Canadian, 365; Australian, 366–7; Cape Colony, 368; French, 369; Austrian, 371; Russian, 372; Spanish, 375; Mexican, 376; Uruguay, 377; Javanese, 388; Midwinter Fair exh's, 975–7.
Ceylon, manufacturers exhibits, 136; woman's department, 282; agricultural, 368; transportation, 579; Ceylon court, 903; tea-garden etc, at Midwinter Fair, 989.
Chaillu, Paul du, visit etc, of, 883.
Chambers, R. C., president Ut. board, 832.
Champagne, ancient fairs of, 12.
Chancellor, W. N., W. Va representation, 791.
Chandler Mine, model of the, 476.
Charities and Correction, bureau of, 649–50.
Cheese, Butter, etc., see Dairy Products.
Chemists' Congress, 946–7.
Cheney, Mrs. V., design in Cal. building, 822.
Chester, E. E., educational exhibit, 825.
Chicago, historical sketch of, 29–36; manufactures exhibits, 165, 168–71; liberal arts, 232, 254; machinery, 316, 323–8, 385–7, 501; electrical apparatus, 423; wooden ware, etc., 456; mining, 505; fish products etc., 521–3; boats, 539; angling outfits, etc., 540–1; railroad supplies, 569; bicycles etc., 581; draft horses, 624; charities and correction, 650; contributions to Midwinter Fair, 975–6;
Chicago Art Institute, description of, 35; exhibit etc, 225; congresses held in, 74, 921.
Chicago Day, celebration of, 808–10.
Chicago Fly-casting Club, exhibits and tournament, 540–1.
Chicago Horticultural Society, floral exhibition, 973.
Chicago Iron Works, mining machinery etc, 500.
Chicago & Northwestern Railroad, exhibit, 560.
Chicago Woman's Club, quarters, etc, in woman's department, 284.
Children's Home, creation and purposes of, 73–4; exhibits, etc, 291–300.
Chile, mineral exhibits, 497.
China, exhibits of manufactures, 220–1.
Chinaware, exhibits, 179–82, 191.
Chinese Village, Columbian Exposition, 873–6, Midwinter Fair, 988–89.
Christian, King, silver statue of, 213.
Christian Moerlein Brewery, exhibit, 387.
"Christopher Columbus," whaleback steamer, 603.
Churchill, Lady, member of English committee, 72.
Cincinnati, Columbian anniversary in, 98; woman's department, 263–4; machinery, 314, 326–7.
Civil Engineering Congress, 939.
Clark, N. T., exhibit of horses etc, 616.
Clarke, Mrs., concerts arranged by, 967.
Cleaves, Gov. H. B., Me. dedication day, 787.
Cleveland, O., electric motors etc, 418, 423.
Cleveland, President, at opening day, 94–7.
Cliff-Dwellers, abodes etc, of, 662.
Clocks, exhibits of, 155–56, 182, 197.
Clock Tower, in Manufactures building, 142.
Cloisonné Ware, exhibits, 222, 763–4.
Clothing, exhibits, 161, 219, 227.
Clough, H. E., prizes for Herefords, 620.
Coal, U. S. exhibits and production, 469–88, 503, 507; German, 488–90; British, 490–1, 508; Canadian, 492; Australian, 493; French, 493–5; Japanese, 496; Brazilian, 497; Argentenian, 497; Mexican, 498.
Coalport China Company, exhibits, 182.
Coast and Geodetic Survey, exhibits, 113.
Cobb, H. I., architect of Fisheries building, 65.
Coburn, M. W., Kan. day, 833.
Cockburn, G. R. R., Canadian commissioner, etc, 898, 900.
Codman, H. S., landscape designer, 53.
Coffee, exhibits, 382, 388, 917–18.
Coins, collections of, 110–12, 653.
Cold Storage Building, contents and burning of, 328, 339.
Colleges, exhibits of, U. S., 237–41; German, 241.
Collins, Capt., chief of Fisheries department, etc, 539.
Cologne, exposition at, 18.
Colombia, government building and contents, 914–5; dedication day, 920.
Colonial Relics, exhibit of, 102.
Colorado, educational exhibits, 238; agriculture, 360; fruits, 442, 446; forest products, 455–6; mining, 486–8; archæology, 634; state building and contents, 830; resources and development, 830–1.
Colorado Gold Mine, Columbian Exposition, 840–1; Midwinter Fair, 988.
Columbian Anniversary, celebration etc, of, 98.
Columbian Exposition, projects for the, 37–8; contest for location, 39–40, 50; congressional and municipal action, 39–43, 46–7; national commission, 42, 69–70, 972; board of lady managers, 42, 69, 74, 973; foreign and state appropriations, 43, 51; department of publicity and promotion, 43–4, 51; site, 44, 47, 57; board of reference and control, 45, 69; council of administration, 46, 69; finances, 46–7, 50, 81–2, 959–60, 972; construction, 49–51, 58–68, 90–1; sketch of grounds and buildings, 52–68; means of communication, 57, 58–9; allotments of space, 63–4; artificers, 64–7; management, 68, 74, 77, 80, 84, 972; regulations, 77–8; traffic department, 78–9; fire and police, 79, 85, 974; Columbian guards, 79–80, 84; hospitals, 80, 974; restaurants, etc, 80–1, 974; Sunday closing, 83–4; music and concerts, 84, 966–8; dedication, 86–90; naval review and parade, 91–4, 98; opening, 94–8; closing ceremonies, 956; attendance, 956–9; destruction of of buildings, 960–1; sale of exhibits, 964; awards and medals; 964–5; dramatic performances, 968; special celebrations, 968–70; banquets, 970–1; lessons and influence of the Exposition, 972–3; tickets and passes, 973–4.
Columbian Guards, organization, services, etc, 79-90; 84.
Columbian Liberty Bell, 968–9.
Columbian Museum, its origin, contents, etc, 965–6.
Columbian Relics and Literature, 655–61; 961.
Columbus Buggy Company, exhibit, 572.
Conby, Major C., in charge of war department exhibits, 104.
Commercial Cable Company, exhibits etc, 420–1.
Commercial and financial congresses, 930–2.
Comstock Lode, yield etc, of the, 479–81.
Concerts, Columbian Exposition, 84, 966–8; Midwinter Fair, 988.
Concessions, control, proceeds, etc, of, 46, 881.
Congress, action as to Columbian Exposition, 41–3, 46–7, 74, 83, 207.
Congress Auxiliary, purposes, organization, and proceedings, 74–6, 921–2; inaugral exercises, 97; literary congresses, 75–6, 933–6; educational, 76, 936–9; religions, 76, 948–53; government, 76, 943–4; participation of women, 922; congress of representative women, 922–3; press, 923–5; medical, 925–6; social purity, 926; temperance, 926–9; moral and social reform, 929; commerce and finance, 930–2; musical, 932–3; engineering, 939-42; art and architecture, 942–3; African, 944–6; science and philosophy, 946–7; labor, 947–8; patents, etc, 953; agriculture and horticulture, 953–5; real estate, 955; humane and waifs' saving, 955.

Connecticut, woman's department, 262–3, 287; machinery, 322; agriculture, 390; forest products, 455; mining, 472; live-stock, etc., 624–5; state building and exhibits, 779.
Constantinople, exhibition at, 20.
Conway, E. S., odd-fellows' celebration, 969.
Cook & Son, exhibits in transportation department, 595 6.
Cooke Locomotive and Machine Company, exhibit, 561.
Cooke, Mrs. S. G., services to woman's department, 70.
Cooper, T. S., premiums, 621.
Copper and Copper Ores, U. S. exhibits, 474, 474–7, 482–8, 503; German, 488–9; British, 490–1; Canadian, 492; Australian, 493; Japanese, 496; Spanish, 497; Brazilian, 497; Cape Colony, 500.
Corea, exhibits of manufactures, 219.
Cork, exhibit of, 371.
Corn, see Cereals.
Corundum, samples of, 478.

D

Dahomean Village, 877–8, 883.
Dairy Building, description of, 391–2.
Dairy Products, Appliances, and Tests, British, 363–4; Canadian, 365; Danish, 375; U. S. 387–97.
Daniel, J. W., oration, Va. day, 790.
Danish Sloyd Association, exhibit, 213.
Davis, G. R., services as director-general etc., 50, 70, 77, 89, 833, 920, 971.
De Bruyn, G. J. L., manager of Javanese village etc., 849.
Deering, W. & Co., harvesting machinery, 387.
Delaware, agricultural exhibits, 355; fruits, 442; state building and exhibits, 778.
De Lome, E. D., Spanish commissioner, 912.
Delphi, ancient fairs at, 6.
Denmark, exhibits of manufactures, 213; liberal arts, 250; woman's department, 274; agriculture, 375; fine arts, 746–8.
Depew, C. M., address on dedication day etc., 89, 772.
"De Witt Clinton," locomotive and train, 555–6.
De Wolf, S., president Mont. board, 829.
De Young, M. H., banquet to, 971; director-general, Midwinter Fair etc., 974–6.
Diamond Washing, process of, 499–500.
Diamonds and Precious Stones, see Gems.
Dickinson, J. T., secretary national commission etc., 70, 797.
Dillingham, W. P., Vt. day, 785.
Dimock, W. D., secretary Canadian commission 898.
Donegal Industrial Fund, exhibits etc., 844–7, 882.
Donegal Irish village, 844–7, 882.
Douglass, F., speeches etc. of, 786, 833, 920.
Doulton & Co., pavilion and exhibits, 181.
Drawings, pastel, pen etc., U. S. collections, 688 9; French, 709; Italian, 715; Mexican, 717; British, 725; German, 733; Belgian, 735; Swedish, 751.
Dreer, H. A., exhibit of seeds, 445.
Dresden, exhibits of machinery, 331–2.
Drummond, D., prizes awarded to, 621.
Dublin, expositions at, 12.
Dubuque, exhibit of machinery, 326.
Dulaney, W. H., at Ky. dedication, 793.
Duluth, mining exhibits, 475–6.
Dunedin, exposition at, 27.
Dunham, W. W., exhibits of horses etc., 915–18.
Dunraven, Lord, exhibit of photographs, 858.
Dusseldorf, exhibits of machinery, 329–31.
Dvorak, A., ovation, Bohemia day, 919.
Dyche, L. L., exhibits in natural history, 818–9.
Dyes, exhibits of, 184.
Dynamos, exhibits of, 406–7, 413.

E

Eagle, Mrs. James P., member of Ark. board, 795.
Eagle Cotton Gin Company, exhibit, 387.
Ecuador, agricultural exhibit, 377; mining, 497; archæology, 637.
Edbrooke, W. J., architect of Government building, 65.
Edis, Col., architect of Victoria house, 892.
Edison, T. A., visit etc. of, 971.
Edison Manufacturing Company, exhibits, 420.
Edison Tower, description of, 406, 424.
Education, exhibits in Government department, 115–17; U. S. exhibits, 233–41; 256; 272–3; 277; 291–300, 805, 827, 833; German, 241 4, 282–3; British, 244 6, 275; Canadian, 246; New South Wales, 246; French, 246–7; Russian, 248; Austrian, 250; Italian, 250; Belgian, 250; Danish, 250; Mexican, 250; Japanese, 250–2; Urugnay, 377; Swedish, 908; Midwinter Fair, 978.
Educational congresses, proceedings etc. 76, 936–9.
Eiffel Tower, model of the, 870.
Electric Clocks, exhibit, 421–2.
Electric Incubators, exhibit etc. 422.
Electrical Congress, proceedings etc. 946.
Electrical engines and motors, U. S. exhibits, 311–12, 340, 407, 409, 413, 417–18, 570; German, 329, 413 14.
Electrical Heating Apparatus, 422-3.
Electricity Department, illuminations, 400–2; building, 59, 402–4; plan and character of exhibits, 405–6; U. S. exhibits, 406–13, 417–25; German, 413–14, 424; French, 414–15, 422; British, 416; Austrian, 416, 422; Japanese, 416–17; Italian, 422.
Electro-medical apparatus, 419, 421.
Electro-plating, machinery for, 419, 421.
Electrotyping, machinery for, 419.
Ellsworth, Mrs., design for fountain, 795.
Elmira Reformatory, model of, 649.
Embroideries, exhibits from Hindostan, 186; French, 193; German, 201, 282–3; Danish, 213; Mexican, 218; Corean, 219; Siamese, 220; Chinese, 220–1; Japanese, 223, 279, 763; British, 275–6; Russian, 276; American, 277; Spanish, 278; in woman's department, 289 90; Belgian, 282; Austrian, 282, 338; Persian, 379.
Emmons, G. T., Alaskan collection, 123.
"Empire State Express," locomotive and train, 554–5, 606.
Engineering Congresses, proceedings etc., 939–42.
England, see Great Britain.
Engravings, Keppel collection, 287–8; U. S. collection, 687–8; Mexican, 717; British, 725; German, 733; Austrian, 735; Belgian, 735; Swedish, 751.
Entomology, exhibits in, 126, 135.
Erfurt, horticultural exhibits, 445.
Erikson, Leif, sketches etc. relating to, 213.
Eskimo village, Columbian Exposition, 878–9; Midwinter Fair, 989.
Eskimos, fairs among the, 23.
Essex Institute, art exhibit, 592–3.
Etchings, Keppel collection, 287–8; U. S. collection, 687; Mexican, 717; British, 725; German, 733; Austrian, 735; Belgian, 735; Dutch, 744; Swedish, 751.
Eulalia, Infanta, visit etc. of, 912, 971.

F

Fairchild, Gen., collection of portraits, 812.
Farquahar, A. B., speech Pa. day, 777.
Farrington, W. C. D., exhibit of flies, 134.
Feehan, Archbishop, speeches etc. of, 875, 949, 951, 968.
Fellows, J. R., Manhattan day, 772.
Felton & Carlswerk, electrical apparatus, 414.
Ferdinand, Archduke, visit etc. of, 971.
Ferns, display of, 431–4.
Ferris, G. W. G., artificer of Ferris wheel etc., 868, 882.
Ferris Wheel, 868–70, 881–2.
Ferry, T. W., Mich. dedication, 833.
Festival Hall, Columbian Exposition, 84; Midwinter Fair, 987.
Field, M., premium awarded to, 624; gift to Columbian museum, 966.
Filson club, historic relics, 793.
Findlay, J. V. L., Md. day, 792.
Fine Arts Department, building and decorations, 61, 667–9; character and scope of exhibits, 665–9; selection and arrangement, 668 71, 764; U. S. display, 671–90; French, 690–709; British, 694, 718–27; German, 694, 729–33; Dutch, 694, 735–44, 764; Belgian, 694, 735; Swedish, 694, 749 51; Italian, 694, 709–15; Spanish, 694, 715–17; Mexican, 717; Venezuelan, 718; Brazilian, 718; Canadian, 727; Australian, 728–9; Austrian, 733–5; Danish, 746 8; Norwegian, 751–4; Russian, 754–60; Japanese, 760–4; Swiss, 764, 853–4; Midwinter Fair, 982.
Fire Department, 79, 974.
Fire Engines and Apparatus, 316, 331, 338.
Firth Wheel, at Midwinter Fair, 990.
Fisheries, government exhibit, 123–5, 134.
Fisheries Department, building and embellishments, 61, 511–12, 541; classification etc., 509, 512; U. S. collections, 512–24, 537 42; Norwegian, 524–8, 542; British, 528–9; Canadian, 529–32, 541; Australian, 532 4; French, 534; German, 534; Russian, 534–5; Dutch, 535; Grecian, 535–6; Mexican, 536; Japanese, 536–7, 542; Brazilian, 539–40.
Flax, production and exhibits, 346, 348, 353–4, 356, 360, 372 3.
Florence, exposition at, 20.
Florida, agricultural exhibits, 355; fruits, 442–3; forest products, 456; mining, 478; state building and exhibits, 797–8.
Flower, Gov., dedication parade etc., 87, 93, 771, 777.
Folk Lore Congress, proceedings etc., 75 6, 934 5.
Food Preparations and Apparatus, 328, 332, 337–8, 364, 367, 369, 364–82, 388–90.
"Forest and Stream," exhibits, 540–1.
Foresters' Day, celebration, 970.
Forestry Department, building, 450–2; U. S. exhibits, 126, 452–60; Australian, 460–1; Canadian, 461; French, 461; German, 461 2; Russian, 462; Mexican, 462; Brazilian, 463; Argentinian, 463; Paraguay, 463; Spanish, 463; Cuban, 463; Japanese, 463; Hindostan, 463–4; Siamese, 464; Trinidad, 464.
Fort Wayne Electric Company, exhibits, 413.
Fossils, display of, 651, 814.
Foundries and Machine Shops, German exhibits, 330 1.
Fourth of July, celebration, 968.
Fowler, Bishop, dedication ceremonies, 89.
Fowler, Sir J., model of bridge, 564.
Fox, A. O., prize awarded to, 623.
France, fairs and expositions in, 12–18; New York naval review, 91 4; manufactures exhibits, 187; liberal arts, 246–8, 422; woman's department, 274, 279, 287; machinery, 337; agriculture, 368–71, 383, 394; electricity, 414 15; horticulture and forestry, 439, 447–9, 461; mining, 493–5; fisheries, 534; transportation, 567–8, 573; live-stock, 610, 625; fine arts, 690–709; government building and contents, 891; celebration day, 891 2.
Francis, ex-Gov., speech Mo. day, 795.
Frank, N., Mo. day, 795.
Frankfort-on-the-Main, fairs at, 18; exhibits of machinery, 331; electrical apparatus, 414.
Frankfort-on-the-Oder, fairs at, 18.
Frazer & Chalmers, mining machinery etc., 500.
Fredericks, F. F., educational exhibit, 805.
French Colonies Buildings, 918.
French-Sheldon, Mrs., contributions to woman's department etc., 272, 303, 582, 934.
Fresno County, exhibits in Cal. building, 822; at Midwinter Fair, 984.
Frick Coke Company, exhibits, 469, 507.
Frost, W. S., at odd-fellows' celebration, 969.
Fruits, U. S. display, 439–46, 821–2, 827; Australian, 439–40, 443; French, 439; Russian, 439; German, 440, 443; Italian, 443; Canadian, 443; Grecian, 446; at Midwinter Fair, 985–7.
Fuller, Gov. L. K., Vt. day, 785.
Furniture, U. S., exhibits, 161–5; New South Wales, 185; Hindostan, 186; Cingalese, 186; French, 190 1; Bavarian, 198–200; Austrian, 207; Russian, 209; Danish, 213; Brazilian, 216; Japanese, 223–5.
Furs, exhibits of, 171, 185, 209.

G

Gage, Downs & Co., premium for equipage, 624.
Gage, Lyman J., a promoter of the Columbian Exposition etc., 41, 70.
Games, historical exhibit etc. of, 641–6.
Gas and Petroleum Engines, exhibit of, 329.
Gates Manufactory, mining machinery etc., 500.
Gems, U. S., exhibits, 147 53, 472, 477, 483 5, 506; British, 182; French, 188; Siamese, 220; Brazilian, 497; Cape Colony, 499 500.
"General," locomotive, 560, 607.
General Electric Company, exhibits etc., 406–8, 416.
General Transatlantic Company, exhibit, 597.
Geneva Clock Company exhibits, 156.
Gentry, N. H., Mo. day, 795.
Geological Survey, exhibits, 122.
Geometrical Machine, exhibit etc. of, 326.
Geraldine, D., superintendent of construction, 65.
German Art Association, collective exhibit, 729–33.
German Electrical Society, exhibits, 413–14.
German village, Columbian Exposition, 858–63, 881, 967; Midwinter Fair, 989.
Germany, fairs and expositions in, 18; participation in naval review, 91–4, 98; manufactures exhibits, 197 201; liberal arts, 241–4, 254, 288; woman's department, 281–5;

Germany—Continued,
machinery, 328–32, 340; agriculture, 371–2, 383, 394; electricity, 413–14, 424; horticulture and forestry, 434–5, 440, 443–5, 447–9, 461–2; mining, 488–90; fisheries, 534; transportation, 565–7, 575; fine arts, 694, 729–33, 888; live-stock, 628; government building and contents, 885–90; celebration day, 890.
Ghent, expositions at, 20.
Gherardi, Admiral, in command at naval review, 93.
Gibbons, Cardinal, dedication ceremonies etc., 89, 238, 792, 948–51.
Gilfillan, J. H., premiums, 621.
Glass Ware, U. S. exhibits, 147, 169; British, 184; Bohemian, 203; Belgian, 207; Italian, 215; Austrian, 338; Swedish, 905.
Gloucester, fisheries exhibits etc., 517–18.
Gold and Gold Ores, U. S. exhibits and production, 474–88; German, 488; Canadian, 491–2; Australian, 493; Japanese, 496; Brazilian, 497; Ecuador, 497; Mexican, 498.
Gold Ware, U. S., exhibits, 147–53; British, 182; Hindostan, 189; French, 188; German, 197; Austrian, 205; Norwegian, 213; Danish, 213; Siamese, 220.
Golden, Col., mining exhibit, 486.
Goldsmiths and Silversmiths' Company, exhibits, 182.
Goode, G. B., government exhibits prepared by, 70, 107.
Gorham Manufacturing Company, pavilion and exhibits, 145–7.
Goss Printing-press Company, exhibit, 325.
Government Congresses, 76, 943–4.
Government Department, building, 61, 100–1; scope and purposes, 99–100; colonial and other relics, 101–11; exhibits of the state department, 102, 134; justice, 103; war, 103–7, 134; engineering, 106; hospital etc, 106–7; national museum, 107–11, 134; treasury, 111–13; coast and geodetic survey, 113; lighthouse, 113, 129; post-office, 113–15, 134; interior, 115–23; education, 115–17; land office, 117–19; census bureau, 119; patent office, 119–20; geological survey, 122; Indian affairs, 122–3; fisheries, 123–5, 134; agriculture, 125–6, 134–5; botany and entomology, 126, 135; horticulture and forestry, 126–7; naval etc., 127–9, 135.
Graham, E. R., construction department, 65.
Grand Army Day, celebration, 968–9.
Grand Rapids, exhibits, 163; 811.
Granites, 211, 472, 474, 476–7, 480, 482, 485–6, 497.
Grasses, 348–61, 367, 376.
Gray, E., telautograph, 419.
Great Britain, fairs and expositions, 8–12; participation in naval review, 91–4, 98; manufactures exhibits, 178–85; liberal arts, 244–6, 254; woman's department, 274–6, 287–8; machinery, 332–7; agriculture, 362–5; electricity, 416; horticulture, 434, 447–9; mining, 490–1, 508; fisheries, 528–9; transportation, 561–4, 573, 577–9, 593–5; fine arts, 694, 718–27, 894–6; government building and contents, 892–4; celebration days, 894–6; headquarters, Midwinter Fair, 985.
Great Western Railway, exhibit, 563–4.
Greece, fairs and expositions, 6, 20; agricultural display, 373; wines, 439; fruits, 446; minerals, 496; fisheries, 535–6; statuary, 633.
Greeley Expedition, model of, 106.
Gregory, E. J., director of Midwinter Fair, 975.
Grinlinton, J. J., tea exhibit, 903.
Grogan, F. W., builder of the "Illinois," 128.
Guatemala, government building and contents, 912–13; inaugural day, 919.
Gudgell & Simpson, prizes for Herefords, 620.
Guernsey Stock, exhibits and tests, 395–6.
Guilmant, A., organ recitals, 967.
Guitars, exhibits of, 231–2.
Guns, see Ordnance.
Gwynn, J. K., Mo. day, 795.

H

Haarlem, exposition at, 19.
Hagenbeck's Arena, 843–4, 881, 883.
Haliddie, A. S., cable car, 570.
Hall, J. B., premiums, 617.
Hamburg, exhibition at, 18; display of machinery, 331.
Hamburg-American Packet Company, models etc, 596.
Hamlin, G., architect of Donegal Irish village, 846.
Handy, M. P., chief of Publicity and Promotion department, 43.
Hardtmuth & Co., carbons, 416.
Harlan & Hollingsworth Company, models of vessels etc, 586.
Harley, W. H., medal, 797.
Harper and Bros., exhibits, 253, 592.
Harper, W. R., president university of Chicago, 35.
Harps, exhibits of, 231–2.
Harrison, C. H., speech at German celebration, 850.
Harrison, ex-President, visit etc. of, 783, 810–11.
Hart, Mrs. E., promoter of Irish industries, 844–46.
Hartmann & Brown, electrical apparatus, 414.
Hartzburg Springs Company, exhibit, 372.
Harvard University, exhibits of, 237.
Hastings, D. H., Pa. day, 777.
Hatfield House, reproduction of banqueting hall in, 182–3.
Havemeyer, T. A., Jersey stock, 396.
Havens, B. F., Ind. dedication, 810.
Haviland, Annet L., Mich. dedication, 833.
Hawaiian Village, at Midwinter Fair, 987.
Hawley, E. F., exhibit of Shetland ponies etc., 619.
Hayden, Sophia G., architect of Woman's building, 65, 257.
Hayes-Sadler, Col., British Empire day, 895.
Hayti, government building and contents, 918; dedication etc, 920.
Hebrews, commerce and fairs of, 5.
Hector, M., president N. D. board, 833.
Heidelberg, exhibit of machinery, 331; mining, 489.
Hemp, 351, 354, 372–3, 377.
Henderson Ames Company, uniforms etc., 156.
Henderson & Co., seeds etc., 445.
Henneberg and Sons, panorama of Bernese Alps, 764.
Hennessy, Archbishop, speeches Irish day etc., 895, 949, 968.
Henrotin, C., Turkish day, 909.
Henrotin, Mrs. C., vice-president of woman's branch etc., 922.
Henschel & Son, locomotive exhibited by, 565.
Higinbotham, H. N., president, council of administration etc., 46, 70, 882, 972.
Hindostan, fairs in etc., 7; manufactures exhibits, 186; forest products etc., 463–4; archæology, 662–3.
Hoag, J. M., exhibit of Shetland ponies etc., 619.
Hockins Fish-way, model, 531.
Hoe Printing-presses, 324–5.
Hoffacker, C., architect, German village, 863.
Hogs, see Swine.
Hoisting Engines, display of, 314.
Holbert, A. B., premiums, 617.
Holbert, Hallie, Tex. collection, 797.
Holland, fairs and expositions in, 19–20; participation in naval parade, 94; agricultural exhibits, 394; fisheries, 535; transportation, 598; fine arts, 594, 735–44, 764; celebration day, 919.
Hollenben, Baron von, address, German day, 890.
Holzmann, P. & Co., German village built by, 863.
Homoconstic Speaking Tube Company, exhibits, 416.
Honduras, exhibits of tobacco, 390.
Honey, 364, 373, 375, 388.
Hooden Temple, 918.
Hopkins, Vice-admiral, naval review, 93.
Hopley, P. & Co., premiums, 615.
Hops, exhibits of, 348, 353–4, 371.
Horncastle, fairs at, 8.
Horse Shoes, 172, 186.
Horses, 615–20, 624, 628.
Horticultural Congress, 954.
Horticultural Department, building and decorations, 60, 427–30; scope and arrangement of exhibits, 427; U. S. exhibits, 430–50; Australian, 430–4, 438, 443; Canadian, 433–4, 443; Japanese, 434, 439, 448; Mexican, 434; British, 434, 447–9; Belgian, 434, 447–9; German, 434–5, 443, 445–9; Spanish, 435, 439; French, 435, 439, 445–9; Hungarian, 438; Russian, 438–9; Italian, 439, 443; Grecian, 439, 446; Portuguese, 439; Midwinter Fair, 983–4.
Horticultural Implements, exhibits of, 445.
Hospitals, location, service, exhibits etc., 80, 106–7, 974.
Hotchkiss Company, exhibit of ornance etc., 601.
Houghton, Mifflin & Co., pavilion etc, 254.
Household Economics Congress, 954–5.
Hoyt, W. M., premium, 624.
Hubbard, ex-Gov., Tex. day, 797.
Hubbard, W. F., dictation of, 134–5.
Huelva, congress etc, held at, 22.
Humane Congress, 955.
Humboldt County, exhibit, Cal. building, 822; Midwinter Fair, 986–7.
Hungarian Café, 881.
Hunt, A. M., department at Midwinter Fair, 983.
Hunt, L. P., Minn. dedication, 833.
Hunt, R. M., architect of Administration building, 65, 131.
Hunter's Camp, 449–50.
Hutchinson, C. L., ex-president of Chicago Art Institute, 35.
Hygiene and Sanitation, bureau of, 646–9.

I

Ibrahim Hakky Bey, Turkish dedication day, 909.
Ice-making Machines, exhibits of, 328.
Ice Railway, 881.
Idaho, agricultural exhibits, 360; fruits, 442, 446; mining, 482–3; state building and exhibits, 828–9.
Illinois, state building and exhibits, 60, 801–6; agricultural pavilion and exhibits, 349–51, 393–4, 801–3; horticulture, 433, 441–2, 803; horses and live-stock, 615–25; charities and correction, 649–50; pisciculture, 803; relics and curiosities, 803–5; education, 805–6, 833; literature and art, 806; celebration day, 808–10.
"Illinois" battle ship, see Naval Exhibits.
Illinois Central Railroad, exhibit, 560; Fair traffic etc., 974.
Illinois Deaf and Dumb Institution, exhibit, 833.
Illinois Music Teachers, convention, 932.
Illinois Press Association, 833.
Illinois State College of Agriculture, 801.
Illinois State House, war relics, 803–5.
Illinois State University, exhibits, 805.
Illinois Woman's Board, exhibits etc., 805–6.
Illuminations, Columbian Exposition, 400–2, 424–5; Midwinter Fair, 990–92.
Incandescent Lamps, Edison, 406; Westinghouse, 408–9; Farmer, 411; German, 414.
Incubators, exhibits etc. of, 625–6.
India, see Hindostan.
India Building, design and contents, 901–2.
India Tea Association, exhibit, 901.
Indiana, agricultural pavilion and exhibits, 352–3, 393; horticulture and forest products, 431–3, 445, 456; mining, 474; live-stock, 620–4; archæology, 634; state building and contents, 810; celebration day, 810.
Industrial Art Society, 906.
Ingraining Machines, 327.
Insulac, exhibit etc. of, 418–19.
Interior Department, exhibits, 115–23.
International Dress and Costume Company, 838, 883.
International Folk Lore Society, session of, 934.
International Navigation Company, exhibit, 586–7.
Intramural Railroads etc., 601–3.
Iowa, educational exhibits, 238; agriculture, 347, 393–4; fruits, 441–2; mining, 476; horses and live-stock, 615–26; state building and exhibits, 814–16.
Iowa Band, performances etc., 797, 833, 967, 969–70.
Iowa State Historical Society, exhibit, 816.
Ireland, see Great Britain.
Irish Industries Association, exhibits etc., 836–8, 881.
Iron and Iron Ores, U. S. exhibits and production, 471, 474–5, 478, 482–8; German, 489–90; British, 490–1; Canadian, 492; Australian, 493; Austrian, 495; Argentinian, 497.
Iron-clads, British models of, 593–4; German, 596; Russian, 598; Spanish, 599; U. S. 599–600.
Isabella Coins, issue etc. of, 302–3.
Isabella, Queen, portraits etc. of, 656.
Isabella, town, relics from, 657.
Italy, fairs and expositions, 20–1; participation in naval review, 91–4; exhibits of manufactures, 214–15; liberal arts, 250, 254; woman's department, 278–9; machinery, 339; agriculture, 373; horticulture, 439, 443, 447; mining, 495–6; transportation, 575; fine arts, 694, 709–15, 764; headquarters etc, Midwinter Fair, 987.
Ives, H. C., chief of Fine Arts department, 671.

J

Jackson, A. C., superintendent of Fla. building, 798.
Jackson, J. & Sons, prizes for Southdowns, 621.
Jackson Park, site of Columbian Exposition etc., 44, 47–9, 51–7.
Jacquard Looms, display of, 318–21.
Jalapa, fairs at, 22.
Jamaica, exhibits of manufactures, 187.
"James Toleman," locomotive, 564.
Japan, manufactures exhibits, 221–5; liberal arts, 250–5; woman's department, 279; agricultural, 377–8; seismographic instruments etc. 416–17, 425; horticulture and forest products, 434, 448, 463; mining, 496; fisheries, 536–7, 542; transportation, 580, 598–9; fine arts, 760–4; Hōōden temple, 918; commissioners banquets, 920; gifts to Columbian museum, 966.

Japanese Bazaar, 847.
Japanese Tea-house, 920.
Japanese Village, at Midwinter Fair, 988.
Jasper, exhibits of, 476.
Java, agricultural exhibits, 388.
Javanese Village, 847–9; 881.
Jaycox, E. E., manager of traffic department, 78.
Jefferson City, room in Mo. building, 794.
Jeffery, E. T., report etc. of, 39, 84.
Jeffrey Manufacturing Company, mining machinery etc., 501.
Jenney, W. L. B., architect of Horticultural building, 65.
Jersey Stock, exhibits and tests, 395–6.
Jessup Collection, in Forestry department, 454.
Jewelry, U. S. exhibits, 147–53; British, 182; French, 188–91; German, 197; Austrian, 205; Norwegian, 213; Italian, 215; Persian, 381.
Jewett, J. J., Me. dedication day, 787.
"John Bull," locomotive with cars, 549, 558–9; trip to Chicago etc., 605.
Johns Manufacturing Company, exhibit of asbestos, 503.
Johnson, J. A., Minn. dedication day, 833.
Johnson Railroad Signal Company, exhibit, 604.
Johnstone, Norman & Co., furnishings, Victoria house, 892.
Johore, agricultural exhibits, 379, 971; bungalow, 851–3; visit of sultan, 971.
Jonas, Lieut-gov., oration, Bohemia day, 919.
Jones, J. L., service conducted by, 973.
Justice, department of, exhibits, 103.

K

Kane, T. & Co., pleasure boats etc. 586.
Kansas, agricultural exhibits, 356; fruits, 446; mining, 477; state building and exhibits, 817–19; celebrations, 833.
Kansas City, parlor in Mo. building, 794.
Kapurthala, visit of the Maharajah of, 971.
Kells Linens, display of, 846.
Kentucky, parlor in woman's building, 264; agricultural exhibits, 351–2; forest products, 459; mining etc., 472–4; cattle, 620; horses, 624; state building and exhibits, 792–3; dedication day, 793.
Kern county, exhibits, Cal. building, 822, 824.
Keyl, J., premiums, 617.
Keystone Watch-case Company, exhibits, 156.
Kiakhta, fairs at, 20.
Kimberley Mines, exhibits etc., 499–500, 508.
Kindergarten Congress, 936.
"King Bull," Lapland village, 879–80, 883.
King's Daughters, booth in woman's department etc., 285.
Kióto, expositions at, 28.
Knights of Pythias, celebration day, 970.
Koch, R., bacteriological exhibit, 243.
Koznakoff, Admiral, at naval review, 93.
Krupp, F., building and exhibit, 227–9.
Kutzenberger's Columbian Chorus, 797.

L

Labor Congresses, 947–8.
Laces, French, 193, 279; German, 201, 282; Belgian, 207, 282; Danish, 213, 274; Venetian, 215; Spanish, 215, 278; Mexican, 218; Russian, 274, 276; Austrian, 274; British, 275–6; Italian, 278–9, 303; Japanese, 279.
Lafayette Relics, 102, 104, 111, 891.
Laird Brothers, models of steamers etc., 595.
Lambertson, D. H., financial superintendent, 50.
Lamps, exhibits of, 163, 506–7.
"Lancaster," locomotive with cars, 559.
Land Office, exhibits, 117–19.
Lapland Village, 879–80.
La Rabida Monastery, its reproduction, history, and contents, 57, 653–62.
La Rue, H. M., superintendent of viticultural bureau, 447.
Larke, J. S., Canadian commissioner etc. 898, 900.
Laurium Mines, exhibits, 496.
Law, C. F., commissioner, B.C., 898.
Law Reform Congress, 943.
Lead & Galena, U. S. exhibits, 475–8, 482–3, 487; British, 490–1; Canadian, 492; Australian, 493; Grecian, 496; Spanish, 497; Brazilian, 497.
Leather, exhibits of, 225–6.
Leavitt, Mary C., temperance mission etc. of, 284.
Lee, Fitz-Hugh, Va. day, 790.
Leffler, A., Swedish commissioner, 908.
Leipsic, fairs at, 18; machinery exhibit, 320.
Leiter, L. Z., ex-president, Chicago Art institute, 35; gift to Columbian museum, 966.
Levy, R., manager of Turkish village, 855.
Libbey Glass Company, 841–3, 882.
Liberal Arts Department, building, 49, 51, 58, 67, 136–40; arrangement of exhibits, 231; U. S. collections, 231–41, 252–6; German, 241–4, 254; British, 244–6, 254; Canadian, 246; Australian, 246, 255; French, 246–8; Russian, 248–250, 255; Austrian, 250; Italian, 250, 254; Belgian, 250, 254; Danish, 250; Mexican, 250; Japanese, 250–2, 254–5; Midwinter Fair, 979–83.
Liberia, agricultural exhibits, 381–2.
Liberty Bell, original, 94, 96; Columbian, 963.
Libraries, U. S. exhibits, 115; French, 247; woman's department, 262, 286–8; Japanese, 279; children's home, 293, 297; Bancroft, 980–3.
Lick Observatory, exhibits, 826, 979.
Liebig Extract of Beef Company, exhibit, 377.
Liège, fire arms, 207.
Life-saving Station, appliances and exhibits, 128–9, 135.
Lighthouses, exhibits, 113, 129.
Lilburn, R., exhibit of stallions, 619.
Lilienthal, P. N., treasurer of Midwinter Fair, 977.
Lineff Russian Choir, concerts, 967, 990.
Liquors, (see also Wines) alcoholic, 364, 368, 375, 377, 389, 397, 435; malt, 364–5, 372, 377, 387, 435; temperance, 364, 376, 435.
Literary Congresses, 75, 933–6.
Literature, in liberal Arts department, 247–8, 253–5; woman's department, 287, 293, 297; Va. collection, 788; Ill. 806; Ind. 810; Wisc. 812; Cal. 823–4; German, 889; Midwinter Fair, 979–83.
Lithography, exhibit of processes, 326, 338.
Little Falls, paper working appliances, 326.
Live-stock Department, organization and character of exhibits, 609–10; regulations, 614; buildings, 614; U. S. exhibits, 615–28; Canadian, 620–8; Russian, 610, 628; French, 610, 625; German, 610, 628.
Locomotives and Railroad Trains, U. S. display, 121, 408, 549–61; British, 562–4; Canadian, 564; German, 565; French, 567–8.
Lofoden Islands, fisheries etc., 525–6, 542.
London, expositions at, 10–11; exhibits of machinery, 337; vehicles, 573.
London and North Western Railroad, exhibit, 562–3.
"Long Tom," gun, 104.
Looms, exhibits of, 120, 318–22.
"Lord of the Isles" locomotive, 563.
Los Angeles County, exhibits at Midwinter Fair, 985.
Loughborough, Jean, architect, Ark. building, 795.
Louisiana, educational exhibits, 238; agriculture, 354–5; forest products, 457; mining, 478; fisheries, 521; state building and exhibits, 798–800.
Louisiana Sugar Exchange, exhibits, 354.
Louisville, exposition at, 27.
Lowell, manufactures etc. 322.
Lowney Company, pavilion, 397.
Lucknow, exposition at, 27.
Lusk & Co., canned goods, 446.
Lyons, ancient fairs at, 12.

M

McClellan, C. H., in charge of life-saving station, 135.
McCoppin, F., department at Midwinter Fair, 978.
McCorkle, Gov. W. A., W. Va. day, 791.
McCormick, Cyrus H., inventions etc. of, 385–6.
McCormick Harvesting Machine Company, exhibit, 385–6.
McDougall, C. C., architect, Midwinter Fair, 983.
McKim, C. F., architect of Agricultural building, 65.
McKinley, Gov., O. day, 811.
McReynolds, Gen. A. T., Mich. dedication day, 833.
Machinery Department, building, 58–9, 305–7; scope and quality of exhibits, 307–8; U. S. display, 308–28; German, 328–32; British, 332–7; French, 337; Mexican, 337; Russian, 337–8; Austrian, 338; Brazilian, 338; Belgian, 338; Canadian, 338; Australian, 338, Swedish, 338; Spanish, 338–9; Swiss, 339; Italian, 339.
Mackay, J. W., promoter of Commercial Cable company, 420.
Madeira, exhibits from, 581.
Madras, exhibition at, 27.
Madrid, expositions at, 22.
Magdeburg, machinery exhibits, 330–1.
Maguey, fibres and fabrics, 376.
Maine, fisheries exhibit, 519; state building and exhibits, 786; dedication day, 787.
Maize, see Cereals.
Manchester, art exhibition at, 12; machinery exhibit, 334.
Manhattan Plate Company, exhibits, 153.
Mannesmann Works, exhibit of tubing etc. 489.
Manske & Co., mining exhibit, 489.
Manufactures, government exhibits, 109–10.
Manufactures Department, building, 49, 51, 58, 67, 136–40; classification, arrangement and character of exhibits, 140–5; U. S. groups, 145–75; British, 179–85; Canadian, 185; Australian, 185–6; Hindostan, 186; Cingalese, 186–7; Jamaican, 187; French, 187–97; German, 197–201; Austrian, 201–7; Belgian, 207–9; Russian, 209; Norwegian, 210–13; Danish, 213; Swiss, 214; Italian, 214–15; Spanish, 215; Brazilian, 216; Argentinian, 217; Mexican, 217–18; Turkish and Bulgarian, 218–19; Corean, 219; Siamese, 219–20; Persian, 220; Chinese, 220–1; Japanese, 221–5; shoe and leather exhibit, 225–6; merchant tailors' 226–7; Krupp, 227–9; Midwinter Fair, 979.
Mappin Bros., silver-ware, 182.
Marbles, Norwegian, 211; U. S., 472–7, 480, 482, 485–6; Italian, 495; Russian, 496; Japanese, 496; Spanish, 497; Brazilian, 497; Argentinian, 497.
Marguerite, Queen, laces of, 278.
Marine Day, celebration, 969–70.
Marine Engines, models of, 335.
Markham, Gov., Cal. dedication day, 833.
Marsden, Kate, mission etc. of, 280, 303.
Maryland, agricultural exhibits, 355; mining, 478; state building and exhibits, 791–2; Md. day, 792.
Mason, G., project for exposition, 37.
Massachusetts, manufactures exhibits, 168; educational, 237; woman's department, 277; agriculture, 355, 390; forest products, 455, charities and correction, 649–50; state building and exhibits, 782–3, 799; dedication, 783.
Massachusetts Agricultural College, exhibits, 361.
Massachusetts Board of Health, exhibits in sanitation department, 648–9.
Massey, G. V., member of council of administration etc., 46, 777, 971.
Matches, exhibits etc. of, 326–7, 330.
Matthews, Gov., Ind. dedication day, 810.
Maurity, Rear-admiral, Brazilian day, 920.
Meade, R. W., naval exhibit projected by, 128.
Mebarraz, fairs at, 7.
Mecca, fairs at, 6–7.
Mechanical Arts Department, Midwinter Fair, 984–5.
Mechanical Congresses, 939.
Medals, (Columbian, see Awards), collection of, 111–12.
Medical Colleges, exhibits of, 240.
Medical Congresses, 925–26.
Medical Museum, 107.
Meeker, S. J., N. J. day, 778.
Melbourne, exhibition at, 27.
Menier Chocolate Booth, 397.
Merchant Tailors, building and exhibits, 226–7.
Meredith, Mrs. V. C., Ind. dedication day, 810.
Meriden Britannia Company, pavilion and exhibits, 150–2.
Mermod & Jaccard Company, pavilion and exhibits, 153.
Metal Wares, exhibits of, 501–3.
Metal Work, 172, 198–201.
Metallurgical Processes and Apparatus, 489, 491, 503–5, 905.
Meteorological Congress, 947.
Mexican Central Railroad, ethnological specimens etc., 634.
Mexican Orchestra and Band, 967, 970.
Mexico, fairs and expositions in, 22–3; exhibits of manufactures, 217–18; liberal arts, 250; woman's department, 280–2; machinery, 337; agriculture, 376; horticulture and forest products, 434, 462; mining, 497–9; fisheries, 536; transportation, 568–9; ethnology, 634; fine arts, 717; celebration day, 919.
Mica, samples of, 478, 488, 462, 497.
Michigan, agricultural exhibits, 347–8, 394; fruits, 441–2; forest products, 452–3; loggers' camp, 465; mining etc. 474–5; sheep, 621; horses, 624; sanitation department, 646; state building and exhibits, 811; celebrations, 811, 833.
Michigan Stove Company, exhibit, 164.
Midway Plaisance, location and general features, 52, 62, 835–6; Lady Aberdeen's village, 836–8, 881; congress of beauty, 839–40; Adams Express Company, 840; scenic theatre, 840; Col. gold mine, 840–1; Murano Glass factory, 841; Libbey Glass company, 841–3, 882; Hagenbeck's arena, 843–4; Done-

Midway Plaisance—Continued,
gal Irish village, 844–7, 882; Japanese bazaar, 847; Javanese village, 847–9, 882; Samoan village, 849–51; Johore bungalow, 851–3; panorama of Bernese Alps, 853–4; volcano of Kalauea, 855–6; Turkish village, 855–8; Moorish palace, 858–63; Zoopraxiscopic hall, 863; Persian palace, 863–4; street in Cairo, 864–8, 882; Ferris wheel, 868–70; model of Eiffel tower, 870; of St Peter's, 870–1; Austrian village, 871–3; Chinatown, 873–6; Algerian and Tunisian village, 876–7; Dahomey village, 877–8; Eskimo village, 878–9; Lapland village, 879 80; Brazilian concert hall, 880.
Midwinter Exposition, inception, organization etc. 974–6; site and construction, 976; buildings and decorations, 976–7; manufactures and liberal arts department, 977–83; administration, 983; fine arts, 983; horticultnre and agriculture, 983–4; mechanical arts, 984–5; Southern Cal., 985–6; Northern and Central Cal., 986; Or., 987; Nev., 987; British headquarters etc. 987; Canadian, 987; Italian, 987; music and concerts, 988; congresses, 988; Midway plaisance features, 988–92; illuminations, 990–2; benefits and results, 992;
Miehle Company, press etc,. 325.
Milan, exposition at, 22.
Miles, Gen. N. A., dedication parade, 87.
Military Engineering Congress, 940.
Military Tournament. 627.
Miller, ex-Gov., N. D. day, 833.
Millet, F. D., in charge of decoration department etc. 67–8, 882–3.
Milwaukee, exhibits of machinery, 328.
Mine Timbering, exhibit of, 481.
Mineral Waters, exhibits of, 364–5, 371–2, 377, 387–90, 397, 495.
Mines, Mining, and Metallnrgy Department, building, 59, 467–8; scope and arrangement of exhibits, 468–9; U. S. exhibits, 468–88; 500–8; German, 488–90; British, 490–1; Canadian, 491–2; Australian, 493; French, 493–5; Austrian, 495; Italian, 495–6; Grecian, 496; Russian, 496; Japanese, 496; Spanish, 497; Brazilian, 497; Argentinian, 497; Ecuador, 497; Bolivian, 497; Chilian, 497; Mexican, 497–9; Cape Colony, 499–500, Midwinter Fair, 985.
Mining Camp of '49, at Midwinter Fair, 988.
Mining Machinery, exhibits of, 500–1.
Mining and Metallurgical Congress, 939–40.
Minneapolis, dairy products, 394.
Minnesota, educational exhibits, 238; agriculture, 348, 393; fruits, 441–2; forest products, 459, 465; mining, 475–6; fisheries, 523; horses, 615–17, 624; cattle, 620; state building and exhibits, 812–13.
Mission Congresses, 952, 955.
"Mississippi," locomotive, 560.
Missouri, educational exhibits, 237–8; agriculture, 354, 394; horticulture, 433, 438, 442; forest products, 452–3, 465; mining, etc. 476–7; fisheries, 540; live-stock and horses, 620–1, 624, 628; archæology, 635; state building and exhibits, 793–5; dedication day, 795.
Mitchell, Col. J., president, Ark. board, 796.
Mitchell, Maria, works etc. of, 277.
Mitchell, R. B., director of Midwinter Fair, 977.
Moberly, T. S., exhibit of shorthorns etc., 620.
Model Kitchen, 286.
Modums Fishing Association, exhibits, 526–7.
Mohair, exhibit of, 368.
Moissan, M., electric cupola etc., 415.
Moline Plow Company, pavilion, 387.
Monroe, Miss H., commemoration ode, 89.
Montana, golden nail from, 266, 302; exhibits in woman's department, 274; agriculture, 360–1; fruits, 442; mining, 485–6; silver statue, 508; state building and exhibits, 829–30.
Monterey County, exhibits at Midwinter Fair, 986.
Moorish Palace, 858.
Moors, H. J., manager of Samoan village, 851.
Moral and Social Reform Congresses, 929.
Morrill, Senator, visit of, 971.
Morse, C. S., medal awarded to, 797.
Morse, S., telegraph instruments etc. 423.
Mortisers, exhibits of, 326.
Morton, Vice-president, dedication day etc. 89, 98, 396.
Mosaics, French, 191; Italian, 215; Spanish, 215; Brazilian, 216; Argentinian, 217; Japanese, 223; U. S. 277.
Moscow, exposition at, 20.
Mount Holyoke College, exhibit, 799.
Muckross Abbey, reproduction of, 837.
Muir, H. & Sons, exhibits, 156.
Munich, exposition at, 18.
Municipal Government Congress, 943, 955.
Murano Glass Factory, exhibits, 841.
Murdock Engine, 551, 605–6.
Murphy, E., chief of fire department, 974.
Music, at Columbian Exposition, 84, 966–8; Midwinter Fair, 988.
Musical Congresses, 932–3.
Musical Instruments, exhibits of, 220, 231–3, 422.
Muskegon, refrigerators, 165.

N

Naples, expositions at, 22; bronzes, 712.
National Commission, organization, functions, etc., 42, 44–5, 69–70.
National Grange, operations etc. of, 24.
National League of Good Roads, exhibit, 397.
National Museum, exhibits, 107–11, 134.
National Real Estate Association, 955.
National Travellers' Protective Association, dedication of Mo. building, 795.
National Wall Paper Company, exhibits, 163–4.
Natural History, exhibits in, 108–9, 651–3, 813–14, 817–19, 827–30, 914.
Naval Engineering Congress, 940.
Naval Exhibits, 62, 127–9, 135.
Naval Review and Parade, Columbian, 91–4, 98.
Neal, J. R. & Co., fisheries, 515–16.
Nebraska, agricultural exhibits, 347, 388, 393; forest products, 459–60; state building and exhibits, 816.
Necklaces, exhibits of, 148.
Neff, J. H., director of Midwinter Fair, 976.
Nelson, Gov. K., Norse dedication day, 909.
Nets, Seines etc., exhibits of, 515–21, 525–8, 531–7, 540.
Nevada, agricultural exhibits etc., 359; mining, 488; fossils etc., 651; exhibits at Midwinter Fair, 988.
New Bedford, fisheries exhibit etc., 518–19.
New Brunswick, mineral exhibits, 492; fisheries, 529–32.
New Caledonia, ethnological specimens, 639.
New England, exhibits of manufactures, 156–60; education, 237; fisheries, 509, 515–19, 542; fine arts, 673–4, 677–90.
New England Manufacturing Jewellers, collective exhibits of, 150.
New England Tobacco Growers' Association, exhibit, 390.
New Hampshire, agricultural exhibits, 355–6, 394; mining, 472; state building and exhibits, 785–6; dedication day, 786.
New Jersey, woman's department, 264, 287; machinery, 325; agriculture, 355, 390; horticulture, 431–3, 438, 441–2, 445, 447; forest products, 455; mining etc., 472, state building and exhibits, 777–8; N. J. day, 778.
New Mexico, woman's department, 274; agricultnre, 360; horticulture, 446; mining, 487–8; territorial building and exhibits, 832.
New Orleans, expositions at, 27.
New Orleans Board of Trade, exhibits, 354.
Newsom, S., architect, Midwinter Fair, 983.
New South Wales, manufactures exhibits, 185–6; liberal arts, 246, 255; woman's department, 276, machinery, 338; agricnlture, 365–7; wines, 438; forest products; 438; mining, 493; fisheries, 523–4; transportation, 565; ethnology, 639; fine arts, 728–9, 900; government building and contents, 900–1.
New York Central Railroad, exhibit etc., 554–6, 606.
New York City, exposition at, 23; naval review and parade, 91–4, 98; manufactures exhibits, 171; woman's department, 278; machinery, 312–16, 325–6; electrical apparatus, 417–21; fish products etc., 520; railroad supplies, 570; fine arts, 674–90.
New York Condensed Milk Company, exhibit, 389.
New York State, manufactures exhibits, 156, 159; educational, 235–7; woman's department, 272–3, 287–9; machinery, 325; agriculture, 353, 388, 393–4; horticulture, 431–3, 438, 441–9; forest products, 454–5; mining etc. 472, 503–8; transportation, 591–2; horses and live-stock, 619–25; charities and correction, 649; natural history, 651; fine arts, 677–90, 767–8; state building and exhibits, 766–7; Manhattan day, 771–4.
New Zealand, ethnological specimens, 639.
Nicaragua Canal, relief map and models of, 588–9.
Nickel, exhibit of, 491.
Nijni Novgorod, fairs at, 20.
Nitrate of Soda, exhibit of, 497.
Non-magnetic Watch Company, 156.
Nordenfalk, Baroness, collection of fans, 906.
Nordica, Mme., Me. dedication, 787.
North Carolina, agricultural exhibits, 353–4; forest products, 452–4; mining, 477–8; fisheries, 521.
North Dakota, agricultnral exhibits, 356; forest products, 459–60; natural history, 814; state building and exhibits, 813–14; N. D. day, 833.
North German Lloyd Steamship Company, exhibit etc., 596.
Northern California, exhibits at Midwinter Fair, 986.
Northern Railway, exhibit, 568.
Northwestern University, 35.
Norway, exhibits of manufactures, 210–13; woman's department, 280; fisheries, 524–8; fine arts, 751–4; government building, 909; celebration, 909.
Nova Scotia, exhibit of fruits, 443; minerals, 492; fisheries, 529–32.
Nuggets, collection of, 506.

O

Odd-fellows' Celebrations, 969.
Ohio, educational exhibits, 237; agriculture, 351, 388; wines, 438; fruits, 442; forest products, 460; mining etc., 474; fisheries, 540; live-stock, 621–6; archæology, 634–5; charities and correction, 649–50; state building and exhibits 810–11; celebration, 811.
Oils, exhibits of, 217, 382–3, 506–7.
Oklahoma, agricultural exhibits, 356; territorial building, 832.
Old Colony Railroad, exhibit, 560.
Old Times Distillery Company, 397.
Old Vienna, reproduction of, 871–3.
Oliver Chilled Plow Works, 387
Olmsted, F. L., landscape art, 53.
Ontario, horticultural display, 434, 443; forest products, 461; minerals, 491–2; fisheries, 531; live-stock, 621; horses, 624; archæology, 634.
Onyx, exhibits of, 218.
Orange Free State, agricultural exhibits, 382.
Orchids, display of, 433.
Ordnance, exhibits of, 104–5, 121, 134, 216–19, 227–9, 600–1.
Oregon, educational exhibits, 238; agricultural, 359; fruits, 442; forest products, 460; mining, 481–2; fisheries, 524; Midwinter Fair, 987–8.
Organs, exhibits of, 231–3.
Orvis, C. F., exhibit of flies, 134.
Ostrich Farm, at Columbian Exposition, 881; Midwinter Fair, 992.
Ottawa, mineral exhibits, 491; fisheries, 531.
Owens, J. E., medical director etc., 80, 85, 974.

P

Pabst Brewing Company, exhibit, 387.
Pacific Coast Steamship Company, exhibit, 824.
Paints, exhibits of, 170–1, 184.
Pairpoint Manufacturing Company, exhibits, 152.
Palladium, exhibit of, 483.
Palmer, P., gift for museum of woman's work, 966.
Palmer, Mrs. P., president, board of lady managers etc., 70, 89, 264–6, 302, 922.
Palmer, T. W., president of national commission etc., 70, 89, 833, 970–1.
Panghorn, J. G., secretary, American exhibitors association, 604.
Paper, exhibits of, 219, 323, 375; machinery for cutting etc, 325–6, 331.
Paraguay, agricultural exhibits, 376–7; forest products etc. 463; ethnology, 637–9.
Paralta, M. M., Costa Rica day, 919.
Paris, exhibitions at, 13–18; exhibits at Columbian Exposition, 568, 573, 891.
Parliament of Religions, see Religions Congresses.
Pastels, see Drawings.
Patents, government exhibits, 119–20; woman's department, 272.
Patents and Inventions Congress, 953.
Paterson, N. J., silk exhibits, 159.
Pattison, Gov., Pa. day, 777.
Paul, H., premiums, 620.
Peabody & Stearns, architects of Machinery hall, 65, 305.
Peninsular and Oriental Steamship Company, exhibit, 594–5.
Pennsylvania, educational exhibits, 237, 291; machinery, 316, 326; agriculture, 348–9, 393, 396; horticulture, 431–3, 442, 447–9; forest products, 460; mining etc. 471–2, 505–7; pisciculture, 537; cattle, 621; hygiene, charities, and correction, 646–9; natural history, 651; fine arts, 677–90; state building and exhibits, 774–6; Pa. day, 776–7.
Pennsylvania Railroad, 556–60.
Perley, Senator, commissioner for B. C., 898.
Persia, manufactures, exhibits, 220; agriculture, 379.

Persian Palace, 863–4, 883.
Peru, fairs and expositions in, 23; archæological display, 636–7.
Petroleum, 471–4, 477, 486, 488, 492–5.
Philadelphia, expositions at, 23–7; woman's department, 285; machinery, 322–3, 387; electricity, 423; charities and correction, 649–50; fine arts, 677–90, state building, 774.
Philosophical Congresses, 947.
Phonographs, exhibit of, 420.
Photography, 252.
Pianos, 231–3.
Piat, A. & Co., machinery, 337.
"Pioneer," locomotive, 560.
Pisciculture, 125, 523, 526–7, 531, 534, 537–9, 803.
Pittsburg, metallurgical exhibits, 505.
Pittsburg Locomotive Works, 561.
Police department, 79, 85.
Polish artists, society of, 760.
Poppen, U., premiums, 618.
Porcelains, 179–82; 188, 197–8, 203–7, 213, 220–2, 763.
Porter, Gen. H., naval parade etc, 93, 772.
Porter, H. K. & Co., engines, 561.
Portland, Me., electrical apparatus, 417.
Porto Rico, agricultural exhibits, 375.
Portugal, wines, 439.
Post, G. B., architect of Manufactures building, 65, 138.
Post-office, exhibits and service, 113–15, 134, 248.
Postage stamps, collections of, 114, 134, 653.
Pottery, 179–81, 188, 218–19, 263.
Poultry, exhibits, 625–8.
Power Plant, exposition, 309–12, 339–40.
Power Transmission, machinery for, 309–14; 329; 334–5.
Pratt Institute, Brooklyn, exhibit, 303.
Press Congresses, 923–5.
Princeton College, exhibits, 237, 256.
Printing Presses etc, 120, 324–6, 336–7.
Providence, R. I., gymnastic apparatus etc., 646.
Psychological Congress, 947.
Publicity and Promotion, department of, 43–4.
Publishing Firms, 247–8; 253–5.
Pullman, G. M., gift to Columbian museum, 966.
Pullman Palace Car Company, exhibit etc, 551–4, 605.
Pumping Engines, 314–15.
Putnam, F. W., chief of Anthropological department, 70, 633.

Q

Quarantine System, apparatus etc, of, 649.
Quartermaster's Department, exhibit, 105–6.
Quebec, province, fruits, 443; forest products, 461; minerals, 492; fisheries, 531.
"Queen Empress," locomotive with cars, 562–3.

R

Radke, J., architect of German building, 886.
Railroad Day, celebration, 605.
Railroad Supplies, exhibits of, 569–70.
Railroads, their development and exhibits, U. S., 549–61; British, 561–4; Canadian, 564–5; Australian, 565; German, 565–7; French, 567–8; Austrian, 568; Mexican, 568–9.
Rampur, visit of rawab, 971.
Rand, McNally & Co., railroad ticket office etc, 569.
Randolph & Clewes, pavilion, 503.
Real Estate Congress, 955.
Refrigerators etc, 165, 316, 328.
Rehan, Ada, silver statue of, 486, 508.
Reichstag, reproduction of, 197.
Religious Congresses, 76, 948–53.
Remington Rifles, exhibit of, 166.
Representative Woman's Congress, 922–3.
Restaurants and Cafés, 80–1.
Revolvers, exhibits of, 167.
Reynolds, Gov. R. J., Del. day, 791.
Rhode Island, manufactures exhibits, 160; fisheries, 519–20; state building and exhibits, 780; R. I. day, 782.
Rhode Island Locomotive Works, exhibit, 561.
Rice, Col. E., in charge of Columbian guards etc., 80, 84.
Rich, Gov. J. T., Mich. dedication day, 833.
Richards, H. B., cattle, 621.
Richards, Mrs., Ut. day, 833.
Richmond Locomotive Works, 561.
Rickards, Mrs. J. E., Mont. board, 829.
Rifles, 104–5, 121–2, 165–7.
Rio de Janeiro, exhibition at, 27.
Riverside County, exhibits at Midwinter Fair, 985.
Road-making, machines and specimens, 339, 397.
Robbins, J. G. & Son, premiums etc, 620–1.
Rochester Lamp Company, 163.
"Rocket" locomotive, 551, 561.
Rogers Locomotive Works, exhibit, 561.
Rome, ancient fairs of, 6.
Root, J. W., bureau of construction, 64.
Rose Garnet, 498–9, 508.
Rugs, 218, 220, 379.
Russell, Gov., dedication parade, 87.
Russell, J. & W., prize for shorthorns, 620.
Russell Company, leaching processes, 504.
Russia, fairs and expositions in, 20; participation in naval review, 91–4, 98; manufactures display, 209; liberal arts, 248–50; 255; woman's department, 276–7; machinery, 337–8; agriculture, 372–3, 383; wines and fruits, 438–9; forest products, 462; mining, 496; fisheries, 534–5; transportation, 575–98; fine arts, 754–60; horses, 610, 628.
Rust, H. N., archæological collection, 635.
Ryan, Archbishop, address on educational day, 968.
Ryan, Mrs. R., Tex. board, 800.

S

Saddlery, exhibit of, 216, 580.
Safford, Mrs. P., at 4th of July celebration, 968.
St Bartholomew, fair of, 8.
St Clair, J. W., council of administration, 46.
St Denis, fairs at, 7–8.
St Giles' Fair, description of, 8.
St Louis parlor, 794.
St Louis Bridge, model of, 354.
St Peter's, model etc, of, 870–1.
St Petersburg, expositions at, 20.
Salisbury, Duchess of, member of English committee, 72.
Samoan Village, 849–51.
Samuels, J. M., chief of Horticultural department etc., 447, 800, 954.
San Bernardino County, exhibits at Midwinter Fair, 985.
San Diego County, fisheries display, 523–4; exhibits in Cal. building, 822; at Midwinter Fair, 986.
San Francisco, exhibits in Cal. building, 822–4; in Midwinter Fair 975–92.
San Joaquin County, exhibits at Midwinter Fair, 986.
San Mateo County, exhibits at Midwinter Fair, 986.
Sander, C. P., at odd-fellows' celebration, 969.
Santa Barbara County, exhibits in Cal. building, 821–2; at Midwinter Fair, 986, 992.
Santa Clara County, exhibit in Cal. building, 822; at Midwinter Fair, 986.
Sargent, F., department engineer, 65.
Sartain, Emily, decorator of Pa. building, 774.
Saws and Sawing Machines, 185, 327, 329, 338.
Saw-mills, models of, 329, 339.
Scenic Railway, 990.
Scenic Theatre, 840.
Schenck, M. V., relief map etc., 591.
Schenectady Locomotive Works, 555, 561.
Schichau, F., engine etc, 565.
Schmidt, C. B., manager, German village, 863.
Schuckert & Co., search-lights, 414.
Schurtz, C., German day, 890.
Schwab, C. H., council of administration etc., 46, 771.
Scientific Instruments, 243, 252–3.
Scientific Congresses, 746–7.
Scotland, see Great Britain.
Scott, I. M., Cal. commissioner, 969.
Scribner Sons, exhibit of, 253–4.
Sculpture, see Statuary.
Search-lights, 60, 401–2, 990.
Seeberger, A. F., treasurer, 832.
Seeds, exhibits of, 382, 445.
Self-winding Clock Company, 155–6.
Seneca Falls, fire engines, 316.
Sewing Machines, 120, 323.
Shainwald, H., Midwinter Fair, 977.
Shanks, Lord-mayor J., visit etc, of, 883, 896, 919, 971.
Sheep, 613–14, 621–3.
Shinn, J. H., educational exhibit, 796.
Shoe and Leather Exhibit, 225–6.
Shortbridge, Gov., N. D. day, 833.
Short-horns, 395–6.
Siam, manufactures, 219–20; woman's department, 280; agriculture, 382; forest products etc., 464.
Siberia, fairs in, 20.
Siemens & Halske, electrical exhibits etc, 414, 505–7.
Silks and Silken Fabrics, U. S. exhibits etc., 158–9, 318–21, 349, 354, 357; British, 183; French, 193–4; German, 201; Russian, 209; Spanish, 215; Bulgarian, 219; Corean, 219; Siamese, 220; Chinese, 220–1, Japanese, 223, 279; Grecian, 373; Brazilian, 376.
Silver and Silver Ores, 474–88, 491–8.
Silver Ware, 147–53, 182, 186–91, 197, 205, 209, 213, 230.
Sioux City Corn Palace, 277–8.
Skiff, F. J. V., chief of Mining department, 474.
Skillings, W. P., architect, Wash. building, 826.
Slauson, E. J., director of Midwinter Fair, 977.
Smalley, B. B., Vt. day, 785.
Smith, A. L., president, Wis. board, 812.
Smith, E. E., Midwinter Fair, 983.
Smith, Gov., N. H. dedication, 786.
Smith, W. A., chief of Transportation department, 546.
Smith & Wesson, firearms, 167.
Smithsonian Institution, exhibits, 107–11, 271–2.
Snowdon, Gen., dedication, 87.
Snow Ploughs, specimens of, 570.
Soap, exhibits of, 168, 388–9.
Social Purity Congress, 926.
Sousa's Band, 967.
South Carolina, mining exhibit, 478.
South Dakota, agricultural exhibits, 356; mining, 477, 503; state building and exhibits, 814.
Southern California, exhibits at Midwinter Fair, 985–6.
Southern Lumber Manufacturers' Association, exhibit, 452.
Souvenir Coins, 47, 51.
Spain, fairs and expositions in, 22; participation in naval review, 91–3, 98; manufactures exhibits, 215; woman's department, 278, 287; machinery, 338; agriculture, 375; wines, 435, 439; forest products, 463; minerals, 497; marine, 599; fine arts, 694, 715–17; government building and contents, 910–12.
Spalding, Bishop, Catholic educational exhibit, 238, 968.
Spinning Machines, 120.
Sponges, 535–6, 539.
Standard Oil Company, 506–7.
Stanford, L., exhibit of wines, 437.
Stanton, J. A., Midwinter Fair, 983.
State Department, 102–3, 134.
Statuary and Sculpture (see also Fine Arts), administration department, 132–3; manufactures, 137–8, 146, 190, 194–8, 207, 209, 213–14, 222, 238; woman's, 260–4, 273–4, 288, 296; machinery, 307; agriculture, 341–3; electricity, 403–4; horticulture, 430; mining, 486; transportation, 545; anthropology, 633, 636.
Steinert, L., collection of musical instruments, 231–2.
Stericker Bros., premiums, 617.
Stevenson, Vice-president, visit etc, of, 783, 968.
Stevenson & Howell, exhibits, 184.
Stokes Manufacturing Company, bicycles etc., 581–2.
Stollwerck Bros., chocolate pavilion, 371–2.
Stone, Gov., speech, Mo. day, 795.
Stonebraker, J. M., prize, 623.
"Stonebridge Lion," locomotive, 551.
Stoves, exhibits of, 164–5, 200.
Strong, Mrs., pampas palace, 833.
Studebaker Bros., vehicles, 572.
Stumm Pavilion, 489.
Stump, I. C., vice-president, Midwinter Fair, 977.
Sturges, Mrs., gift to Columbian museum, 966.
Sugar and Sugar-cane, 346, 351–6, 360, 367, 369, 375–6, 816.
Sullivan, L. H., architect of Transportation building, 65.
Sunday Rest Congress, 953.
Swain, E. R., Midwinter Fair, 984.
Sweden, exhibits in woman's department, 280, 287; machinery, 338; agriculture, 375; fine arts, 694, 749–51; government building and contents, 903–8; Swedish day, 908.
Sweet, C. A., premium, 621.
Swift & Co., food products etc, 382, 624.
Swine, exhibits etc, of, 623.
Switch Boards, 413.
Switzerland, exhibits of manufactures, 214; machinery, 339; fine arts, 764, 853–4.
Sydney, expositions at, 27–8; views of, 185, 246; fisheries exhibit, 532–4; transportation, 565; fine arts, 728–9, 900.
Sylhet Tea Gardens, exhibit, 364.

T

Tacoma, photographs of, 827.
Taft, L., statuary by, 296, 430.
Taft & Co., prize awarded to, 623.
Tapestries, 187, 215, 223, 275–9; 286, 379.
Tasse, Senator, Canadian commissioner etc., 898, 900.
Taussig, Capt., commander of the "Illinois," 135.
Taxidermy, display of, 211, 365, 367, 378, 651–2, 813–14, 817–19, 827, 829–30, 914.
Tea, 368, 376–7, 388, 903.
Telautograph, exhibit of, 419.
Telegraph Systems and Apparatus, 120, 414–16, 423–4.
Telephone Systems and Apparatus, 120, 411–15, 423.
Tellery & Co., art work, 901–2.
Temperance Congresses, 926–9.

Tennessee, mining exhibits, 478; horses, 624.
Tesla, N., electric motors etc. 409, 425.
Texas, horticultural display, 433, 446; state building and exhibits, 796–7; Tex. day, 797.
Thacher, J. B., chairman of committee on awards, 965, 974.
Thacher, Mrs. J. B., collection of, 287.
Thames Iron-works and Ship building Company, models, 593.
Thatcher, S. O., Kan. day, 833.
Thomas, T., musical director, 70, 84, 967.
Thompson, E. H., reproduction of Yucatan ruins, 636.
Thornton, C. S., odd-fellows' celebration, 969.
Thorpe, J., superintendent of floricultural bureau, 447.
Thorwaldsen Relics, 213.
Tickets, Exposition, 973–4.
Tiffany & Co., pavilion and exhibits, 145–50.
Tin and Tin Ores, 477, 486, 493, 503.
Tobacco and Cigars, 346, 351–5, 364–8, 372, 375–7, 389–90.
Tobin, Mrs., Tex. board etc., 796–7.
Toulins, W. L., director of choral department etc., 70, 967.
Tonkin Building, 918.
Toso, F., wood carvings etc. 215.
Traffic Department, 78–9.
Travelling Cranes, 314.
Transportation Department, building and decorations, 59–60, 544–6; scope and arrangement, 543–7; U. S. exhibits, 547–61, 571–3, 581–93, 599–607; British, 561–4, 573, 577–9, 593–5; Canadian, 564–5, 573, 596; Australian, 565; German, 565–7, 575, 596–7; French, 567–8, 574–5, 597–8; Austrian, 568; Mexican, 568–9; Russian, 575; Brazilian, 577; Cingalese, 579; Japanese, 580; Dutch, 598; Cape Colony, 598; Spanish, 599.
Transportation Day, celebration, 604–5.
Treasury Department, exhibits, 111–13, 302.
Trenton, manufactures exhibits, 167; machinery, 316.
Trevithick Engines, reproduction of, 551.
Tricycles, display of, 578, 581.
Trinidad, agricultural exhibits, etc. 375; forest products, 464; live-stock, 627.
Trocadero collection, 696.
Troyes, ancient fairs at, 12.
Tucker, B. D., ode, Va. day, 790.
Tucker, H., chief of admissions department, 973.
Turin, exposition at, 20–22.
Turkey, fairs in, 20; government building and contents etc., 909–10.
Turkish Compassion Fund, 277.
Turkish Village, 855.
Turner, Ida L., Tex. day, 797.
Turners Union, 627, 970.
Type-foundries, apparatus, 325.
Type-setting Machines, 325.
Type-writing Machines, 120.
Tyrol, exhibits in transportation department, 575.

U

Underwood, J. C., odd-fellows celebration, 969.
Uniforms, government display, 106; Brazilian, 216; merchant tailors', 227.
Union Iron-works, exhibit, 588.
United Alkali Company, 184.
United States, fairs and expositions, 8, 23–8; participation in foreign expositions, 10–11, 16–17; naval review, 91–4, 98; government exhibits, 99–129; manufactures, 142–77; liberal arts, 231–41; woman's department, 262–74, 277–8, 283–303; machinery etc., 308–28; agriculture, 344–62, 382–97; electricity, 406–13, 417–25; horticulture, 430–50; forestry, 450–60, 464–5; mining and metallurgy, 468–88, 500–8; fisheries and pisciculture, 512–24, 537–42; transportation, 547–61, 571–3, 581–93, 599–607; live-stock, 609–28; anthropology and ethnology, 629–35, 639–53, 662–3; fine arts, 671–90, 764; state buildings and exhibits, 765–833; Midway plaisance, 835–6, 840–3, 868–70; 881–3; congresses; 921–55; Midwinter exposition, 975–92.
United States Potters' Association, exhibit, 169.
Universities, exhibits etc. of, U. S., 34–5, 235–7, 256, 817–19, 991; German, 241.
Uruguay, agricultural exhibits, 377.
Utah, agricultural exhibits etc. 359–60; forest products, 460; mining, 485; metellurgical, 504; territorial building and exhibits, 831–2; Ut. day, 833.

V

Vaill, J. H., manager, Conn. exhibit, 779.
Van Brunt, H., architect of Electricity building, 65, 403.
Vanderbilt, C., visit etc., of, 971.
Van Meter, Miss A. H., services to woman's department, 264.
Van Natta, W. S., prize for Herefords, 620.
Van Volson Bros., premiums, 617.
Varnishes, 170–1, 184.
Vases, British exhibits, 181–2; Hindostan, 186; French, 188, 191; Bohemian, 203; Belgian, 207; Russian, 209; Danish, 213; Chinese, 221; Japanese, 222–3, 763–4.
Vatican Exhibit, 662.
Vaughan, J. C., exhibit of seeds, 445.
Vegetables, 348–61, 369, 445.
Vehicles, 571–81.
Velasquez, Señor, La Rabida monastery restored by, 654.
Venetian Glass Works, exhibit, 841.
Venezuela, fine arts, 718, 915–17; government building and contents, 915–17; inaugural day, 919–20.
Ventura County, exhibits, Cal. building, 822; Midwinter Fair, 985.
Vera Cruz, fairs at, 22.
Veragua, Duke of, visit 94.
Vermont, mining exhibits, 472; live-stock, 621, 628; state building and contents, 783; Vt. day, 785.
Vessels, Columbian caravels, 582–3; Viking ship, 583–5; U. S. exhibits, 585–93; British, 593–5; Canadian, 596; German, 596–7; French, 597–8; Russian, 598; Japanese, 599; Spanish, 599.
Victoria House, 892–4.
"Victoria," iron-clad, model, 593–4.
Vienna, exposition at, 18–19; manufactures exhibits, 205.
Vienna Prater, at Midwinter Fair, 990.
"Viking Ship," voyage and description of, 583–5.
Violins, exhibits of, 231–2.
Virchow, R., pathological exhibit etc. 243, 863.
Virginia, agricultural exhibits, 354; wines, 438; forest products, 459; mining etc., 478; state building and exhibits, 787–90; Va. day, 790.
Von Moltke, mementos of, 888.

W

Wagner, Mrs. M. M., 4th of July celebration, 968.
Waifs' Saving Congress, 955.
Wait, Mrs. F. E., Cal. commissioner etc., 263.
Wales, see Great Britain.
Walker, F. A., Mass. day, 783.
Wall Papers, 163–4, 2r6.
Walnuts, 445–6.
Waltham Watch Company, 153–5.
War Department, U. S. exhibits, 103–7, 134; Russian, 248.
Ward Natural Science Establishment, 469–71, 506, 651.
Warren Chemical and Manufacturing Company, exhibit, 508.
Washburne, Mayor, dedication ceremonies, 89.
Washington City, fair in, 23.
Washington Relics, 102, 111, 891.
Washington State, agricultural exhibits, 359; fruits, 442; forest products, 452–3; mining, 482; fisheries etc. 524; state building and exhibits, 826–7.
Watches, historic collection and exhibits of, 153–6, 182, 197, 214.
Waterbury Watch Company, pavilion and exhibits, 155.
Watterson, H., dedicatory oration, 89.
Waukesha Hygeia Company, exhibit etc. 316, 397.
Wax, exhibits of, 388.
Weapons, collections of, 104–5, 121–2, 217.
Weather Bureau, system and apparatus, 129.
Webster, Sir R. E., visit etc. of, 918–19.
Welles, Lieut. R., ethnological collection, 637.
Wellington Hotel Company, concession etc., 974.
Wells, J. M., Id. board, 828.
Wells, Fargo & Co., historic collection, 824.
Wendt, C., mining exhibit, 503.
Wermuth, A., German commissioner etc., 888–90.
Wertz, Gov., speech, N. J. day, 778.
West, Gov. C., speech, Ut. day etc., 833, 971.
West Virginia, agricultural exhibits, 354; forest products, 452–3; mining, 477; state building and exhibits, 790–1; celebration, 791.
Western Electric Company, exhibits, 409–11.
Western Railway, exhibit, 568.
Western Union Telegraph Company, exhibits etc., 423–4.
Western Wheel Works, bicycles etc., 581.
Westinghouse Air Brake Company, exhibit, 570.
Westinghouse Electric Company, exhibits, 312, 407–8; Exposition plant, 339.
Weston, I. M., president, Mich. board etc., 833.
Westwood & Winby, locomotive, 564.
Wheat, see Cereals.
Wheeler, Mrs. C., decorations by etc., 261, 289–90.
Wheeler, Dora W., decorative paintings, 262.
Whiskey, Brandy etc. see Liquors, alcoholic.
White Horse Inn, 918–19.
White House, exhibits from the, 102.
White, P., Lady Aberdeen's village, 837.
White, Mrs. P., Lady Aberdeen's village, 837, 919.
White Star Steamship Line, pavilion and exhibits, 604.
Whitehouse, F. M., Exposition architect, 65.
Wild East Show, see Bedouin Camp.
Wildman, R., Johore bungalow, 851.
Wilkinson, Miss, dedication ode, 265.
Williams, A., R. I. day, 782.
Williamson, Mrs. B., decorations, 264.
Willits, E., collection of, 125.
Windmills, display of, 397.
Windsor Castle, model of, 184.
Wines, Bulgarian, 219; Cape Colony, 368; Spanish, 375; Brazilian, 376; Argentinian, 376; German, 434–5; Spanish, 435, 439; French, 435, 439; Californian, 435–8; Eastern, 438–9; Australian, 438; Hungarian, 438; Russian, 438; Japanese, 439; Italian, 439; Grecian, 439; Portuguese, 439.
Winnebago Indian village, 881.
Wire Goods, exhibits of, 167.
Wisconsin, agricultural exhibits, 348, 388, 390, 394; fruits, 441–2; forest products etc., 452–3; mining, 475; pisciculture, 537–9; live-stock, 623; archæology, 635; state building and exhibits, 811–12.
Wisconsin Historical Society, ethnological collection etc., 640, 812.
Woman's Christian Temperance Union, exhibit etc. of, 284.
Woman's Department, building and decorations, 60, 257–65; scope and purposes, 257, 266–9; U. S. exhibits, 262–74, 277–8, 283–303; dedication, 265–6; congressional action, 267; French exhibits, 274, 279, 287; Danish, 274; British, 275–6, 287–8; Russian, 276–7; Spanish, 278, 287; Italian, 278–9, 303; Japanese, 279; Siamese, 280; Swedish, 280, 287; Norwegian, 280; Cape Colony, 280; Mexican, 280–2; Cingalese, 282; Brazilian, 282; Belgian, 282; Austrian, 282; German, 282–3; children's home, 291–300.
Woman's Silk Culture Association, exhibit, 349.
Wood, Sir H. T., secretary of British commission etc., 894–5, 919.
Wood-carvings, 211, 214–15, 220–3, 263, 764, 902.
Wood-working Machinery, 326–7, 329–30, 338.
Wooded Island, 55–6, 448–9.
Wooden Ware, exhibits of, 456.
Woodruff, W., Ut. day, 833.
Woodside, J. W., Pa. day, 777.
Wool, exhibits etc. of, 366–8, 375–7, 388.
Woolen Fabrics, U. S. exhibits etc. 159–61; British, 183; French, 193–4; German, 201; Russian, 209.
Worcester, Mass., cutlery, 165; looms etc. 320–2.
Worcester Royal Porcelain Company, exhibits, 181.
World's Columbian Exposition, corporation, functions and regulations, 69–70.
World's Fair Steamship Company, traffic etc., 603.
Wright, C., pomological bureau, 447.
Wyoming, agricultural exhibits, 360; mining, 488.

Y

Yale University, exhibits of, 237.
Yeaman, P., Mo. day, 795.
Yerkes Telescope, 252–3, 255.
Young Woman's Christian Association, exhibits etc., 284.
Yucatan Ruins, reproduction of, 636, 662.

Z

Zaremba, C., suggestions for exposition, 36.
Zinc, 475–8, 485, 492.
Zithers, exhibits of, 231.
Zoöpraxiscopic Hall, 863.

INSCRIPTIONS

(Furnished by courtesy of Harlow N. Higinbotham, President of the Columbian Exposition).

With the exception of the noble words on the Water-Gate, the contribution of Charles W. Eliot, LL.D., President of Harvard University, there are few inscriptions on the buildings worth recording, although they all have an architectural value. As a matter of record it is worth while, however, to list them.

On the exterior panels over the four entrances to the Administration Building are the following references to the history of Columbus: *East*—"Columbus sailed from Palos with three small vessels August 3rd, and landed on one of the Bahama Islands, October 12th, 1492." *South*—"Columbus, after discovering the new world, made three other voyages of exploration and died at Valladolid, Spain, May 21st, 1506." *West*—"Christopher Columbus was born in Genoa, in 1446, went to sea at the age of fourteen, and entered the service of Spain, January 20th, 1486." *North*—"Columbus received from Ferdinand and Isabella, Sovereigns of Spain, a commission as Admiral of an exploring fleet, April 30th, 1492."

On medallions around the base of the central dome are the following names of discoverers: "Hanno, Nearchus, Ibn-Batuta, Rubruquis, Erik, Raleigh, Marco Polo, Dias, Da Gama, Vespucci, Balboa, Magellan, Cartier, Hudson, Wilkes, Drake, Cabot, Tasman, Ross, Cook, De Soto, Franklin, Livingston, La Salle."

In the Rotunda the following names of countries participating in the exposition are placed upon the sixteen medallions in the spandrels between the arches of the entrances: "Austria, Argentine Republic, Belgium, Brazil, British Guiana, Bolivia, Bulgaria, Cape Colony, Canada, Ceylon, Columbia, China, Curacao, Costa Rica, Denmark, Equador, France, Germany, Greece, Great Britain, Guatemala, Haiti, Holland, India, Italy, Jamaica, Japan, Johore, Korea, Liberia, Mexico, Monaco, New South Wales, Norway, Nicaragua, Orange Free State, Persia, Paragnay, Portugal, Russia, Siam, Spain, Sweden, Switzerland, Trinidad, Turkey, Urugnay, Venezuela."

Upon the eight panels above the arched entrance are inscribed the following Eight Eras of Scientific Discovery: "The Mariner's Compass came into general use in navigation about 1272." "Gunpowder was first employed in European warfare about 1325." "Gutenberg introduced the art of printing from movable type in 1450." "Copernicus explained his system of the Solar System in 1543." "Newton established his theory of the law of gravitation in 1687." "Watt patented his invention of the condensing Steam Engine in 1769." "Jenner discovered the principles of vaccination in 1796." "Morse perfected his invention of the electric telegraph in 1837."

On the frieze above the gallery are inscribed the following forty names of illustrious discoverers in science: "Astronomers—Ptolemy, Copernicus, Galileo, Kepler, Herschel. Electricians—Franklin, Volta, Ampere, Faraday, Henry. Naturalists—Linnæus, Cuvier, La Marck, Agassiz, Darwin. Physicians and Anatomists—Hippocrates, Galen, Vesalius, Harvey, Hunter. Mathematicians—Archimedes, La Grange, La Place, Leibnitz, Newton. Philosophers—Aristotle, Plato, Bacon, Descartes, Kant. Geologists—Humboldt, Werner, Lyell, Murchison, Miller. Chemists—Berzelius, Priestly, Guy Lussac, Lavoisier, Liebig."

The Agricultural Building has but one inscription besides the names of Virgil, Cincinnatus and Sully. It reads as follows: "Loiterers that never sow nor put a plant in earth nor use a plow," and is in a panel on the north-east corner of the building.

The inscriptions on the Children's Building are as follows: *South Side:* "Men are but children of a larger growth." Children's Building." "The hope of the world is in the children." *North Side:* "Just as the twig is bent the tree's inclined." "1492 Children's Building 1892." "God's little ones are to become the Great of the Earth."

Assembly Hall: Over the central arch, "National Live Stock Exhibit," and on the West pavilion, "El. Railway Station."

In the hemicycle of the Electricity Building is the only Latin inscription used as an architectural feature. It occupies a narrow frieze under the panel of the half dome and reads: "Eripuit Caelo Fulmen Sceptrumque Tyrannis." The names of the following eminent electricians are found on the exterior frieze of the building: *South End (West to East)*: "Davenport, Weber, Ronalds, Oersted, Coulomb, Page, Gilbert, Sommering." *Over East Entrance:* "Gauss, Jacobi, Wheatstone." *Northeast Apse:* "Cavendish, Coze, Priestly, La Place, Steinheil, Cooke, Joule, Bain." *Over North Entrance:* "Henry, Faraday, Morse, Siemens, Volta." *Over West Entrance:* "Davy, Don Silva, Arago." *North-West Apse:* "Vail, De La Rive, Saussure, Varley, Gnericke, Field, Maxwell, Thales."

On the large panel either side of the main entrance to Festival Hall are the following names of eminent musicians: "Mendelssohn, Wagner, Purcell, Weber, Rossini, Liszt, Berlioz, Beethoven, Palestrina, Schubert, Spohr, Chopin, Glinka, Schumann, Gade, Meyerbeer."

On the Machinery Hall the words "Palace of Mechanic Arts" are found on the frieze of the corner pavilion; "World's Columbian Exposition" on the frieze of the North porch; on the East porch (North to South) "MDCCCXCII," "Palace of Mechanic Arts." "MDCCCXCII:" and the following names are found on the frieze of the colonnade of this building: *East End (North and South)*: "Boulton, Roebling, Smeaton, Gardner, Newton, Eads, Trautwine, Holly." *North Side (East to West)*: "Symington, Trowbridge, Evans, Stevens, Nasmyth, Stephenson, Siemens, A. Allen Hoe, Maudslay, Fairbairn, Joule, Gifford, McCormick, Hidgkinson, Fulton, Watt, Ericsson, Corliss, Tyndall, Fitch, Whitney."

The large panels of the four great portals of the Manufactures and Liberal Arts Building are mostly filled with a list of articles exhibited in the building according to the published classification. They serve as a simple architectural embellishment, and are as follows: Inscriptions over the North entrance: *Left Side:* "Yarns, Woven Goods, Cotton, Linen Woven, Fitted Goods of Wool, Mixtures of Wool Clothing, Costumes, Sewing Machines, Boots, Shoes, Hats, Caps, Furs, Fur Clothing, Laces, Embroideries, Trimmings, Fans, Artificial Flowers." *Right Side:* "Hair Work, Coiffures, Accessories of Toilet, Traveling Equipments, Valises, Trunks, Toilet Cases, Fancy Leather Work, Canes, Umbrellas, Parasols, Rubber Goods, Caoutchouc, Celluloid, Gutta Percha, Zylonite, Leather, Leather Manufactures." Inscriptions over East entrance: *Left Side:* "Chemical, Pharmaceutical Products, Druggists' Supplies, Paints, Colors, Dyes, Varnishes, Paper, Blank Books, Stationery, Typewriters, Furniture, Upholstery, Artistic Decoration, Art Metal Work, Enamels, Ceramics, Mosaics, Glass, Glassware." *Right Side:* "Stained Glass, Carvings, Marbles, Stone, Metal Monuments Mausoleums, Caskets, Mantels, Gold, Silverware, Plate, Jewelry, Ornaments, Horology, Watches, Clocks, Silks, Silk Fabrics, Tapestries, Fabrics of Jute, Ramie, Vegetable

Mineral Fibres." Inscriptions over the South entrance: *Left Side:* Education, Literature, Journalism, Physics, Astronomy, Chemistry, Photography, Civil Engineering, Architecture, Music, Drama." *Right Side:* "Religion, Industry, Philanthrophy, Charities, Corrections, Hygiene, Sanitation, Medicine, Surgery, Commerce, Government, Law." Inscriptions over West entrance: *Left Side:* "Toys, Fancy Articles, Scales, Weights, Measures, Material of War, Ordnance, Ammunition, Weapons, Apparatus of Hunting, Trapping, Military, Sporting, Small Arms, Lighting Apparatus, Appliances." *Right Side:* "Refrigerators, Tinware, Hollow Metal Ware, Enameled Ware, Wire Goods, Perforated Sheets, Lattice Work, Screens, Fencing, Wrought Iron, Thin Metal, Hardware, Vaults, Safes, Plumbing, Sanitary Materials, Miscellaneous Articles of Manufacture."

The following names of States and Territories are inscribed on escutcheons around the frieze of the buildings: *North End:* "Delaware, Florida, Massachusetts, Rhode Island, New Hampshire, South Carolina, North Carolina, New Jersey, New York, Nevada, West Virginia, Kansas, Oregon, Minnesota, California, Wisconsin, Georgia, Texas." *East Side:* "Michigan, Arkansas, Missouri, Maine, Alabama, Illinois, Mississippi, Indiana, Louisiana, Ohio, Tennessee, Kentucky, District of Columbia, Vermont, New Hampshire, Connecticut, Delaware, Georgia, Maryland, Massachusetts, Virginia, Rhode Island, Pennsylvania, South Carolina, North Carolina, New Jersey, New York, Alaska, Arizona, Utah, New Mexico, Wyoming, Idaho, Washington, South Dakota, North Dakota, Montana, Colorado, Nebraska, Nevada, West Virginia, Kansas, Oregon, Minnesota, California, Wisconsin, Iowa, Florida, Texas, Michigan, Arkansas, Missouri, Maine, Alabama, Illinois, Mississippi." *South End:* "Indiana, Louisiana, Ohio, Tennessee, Kentucky, District of Columbia, Vermont, New Hampshire, Connecticut, Delaware, Georgia, Maryland, Massachusetts, Virginia, Rhode Island, Pennsylvania, South Carolina, North Carolina, New Jersey, New York." *West Side:* "Alaska, Arizona, Utah, New Mexico, Wyoming, Idaho, Washington, South Dakota, North Dakota, Montana, Colorado, Nebraska, Nevada, West Virginia, Kansas, Oregon, Minnesota, California, Wisconsin, Iowa, Florida, Texas, Michigan, Arkansas, Missouri, Maine, Alabama, Illinois, Mississippi, Indiana, Louisiana, Ohio, Tennessee, Kentucky, District of Columbia, Vermont, New Hampshire, Connecticut, Delaware, Georgia, Maryland, Massachusetts, Virginia, Rhode Island, Pennsylvania, South Carolina, North Carolina, New Jersey, New York, Alaska, Arizona, Utah, New Mexico, Wyoming, Idaho, Washington."

The Water Gate at the Peristyle bears the following inscription in the panels, together with the names of the discoverers, Champlain, La Salle, Ponce de Leon, Cortez and De Soto, in the frieze: *On the East Side:* "The Wilderness and the solitary place shall be glad for them. To the bold men, their names remembered or forgotten, who first explored through perils manifold the shores, lakes, rivers, mountains, valleys and plains of this New World." "A few dared, toiled and suffered. Myriads enjoy the fruits." "To the brave settlers who levelled forests, cleared fields, made paths by land and water and planted commonwealths." "Of many races, tongues, creeds and aims but all heroes of discovery." "To the brave women who in solitudes amid strange dangers and heavy toil reared families and made homes." *On the West Side:* "Ye shall know the truth and the truth shall make you free. To the Pioneers of Civil and Religious Liberty. But bolder they who first off-cast their moorings from the habitable past and ventured chartless on the sea of storm-engendering liberty." "Civil liberty the means of building up personal and national character." "I, Freedom, dwell with Knowledge, I abide with men by culture trained and fortified. Conscience my scepter is and Law my sword." "Toleration in religion the best fruit of the last four centuries." "We here highly resolve that Government of the people for the people shall not perish from the earth."

The following names of composers occupy the frieze on Music Hall: *North End:* "Weber, Mendelssohn, Haydn, Purcell, Gallis, Chopin, Wagner, Glinka, Lasso, Gounod, Field, Rossini, Gade." *East Side:* "Schumann, Mozart, Schubert, Montverde." *South End:* "Bach, Beethoven, Cherubini, Liszt, Meyerbeer, Pergolesi, Handel, Halevy, Gluck, Rameau." *West Side:* "Scarlatti, Auber, Berlioz, Lully, Gretry."

"The following names of Composers, Virtuosi, Singers and Dancers occupy the frieze on the Casino: *North End:* "Servais, Donizetti, Adam, Strauss, Spontini, Balfe, Delibes, Abt, Jenny Lind, Spohr." *East Side:* "Mercadante, Malibran, Nicolai, Marschner, Catalani." *South End:* "Mario, Kreutzer, Bizet, Taglioni, Flotow, Lanner, Bellini, Lortzing, Mehul, Lablache, Bennett, Boieldieu, Herold." *West Side:* "Henrietta Sontag, Bottesini, Paganini, Dragonetti, Fanny Ellsler."

The following names of States are placed on the frieze of the Peristyle: *West Side (From Water Gate to Casino):* "Georgia, Kentucky, Tennessee, Ohio, Louisiana, Indiana, Mississippi, Illinois, Alabama, Maine, Missouri, Arkansas, Michigan." *East Side (From Water Gate to Casino):* "Montana, Colorado, Nebraska, Nevada, West Virginia, Kansas, Oregon, Minnesota, California, Wisconsin, Iowa, Florida, Texas." *West Side (From Music Hall to Water Gate):* "New York, New Jersey, Connecticut, Delaware, New Hampshire, Vermont, North Carolina, South Carolina, Pennsylvania, Rhode Island, Virginia, Massachusetts, Maryland." *East Side (From Music Hall to Water Gate):* "South Carolina, North Carolina, New Jersey, New York, Alaska, Arizona, Utah, New Mexico, Wyoming, Idaho, Washington, South Dakota, North Dakota."

On the base of the Statue of Columbus by St. Gaudens is the following passage from Seneca, Media 378: "Venient annis saecula seris Quibus Oceanus vincula rerum Laxet et urgens pateat tellus Tethisque novos detegat orbes Nec sit terris altima Thule."

The following names of cities are found on the frieze of the Terminal Station: *South End (West to East):* "Santa Fé, New Orleans, Charleston, Baltimore." *East Side (South to North):* Washington, Pittsburg, Philadelphia, Albany, Providence, Rochester, Worcester, New York, Chicago, Boston, Detroit, Columbus, Cincinnati, Cleveland, Indianapolis, St. Louis, Kansas City." *North End (East to West):* "Omaha, Denver, San Francisco, Sacramento."

In the spandrels of the great arched doorway of the Transportation Building are the following inscriptions: "There be three things which make a nation prosperous: A fertile soil, busy workshops and easy conveyance for men and goods from place to place."—*Bacon.*

"Of all inventions, the alphabet alone excepted, those inventions which abridge distance have done most for civilization." *Macaulay.*

The conventionalized angels painted in the spandrels of the arches on the exterior of this building bear the following names on panels: "Hackworth, Hudson, Columbus, Trevethick, Cooper, Brunel, Cabot, Gugnot, Borsig, Van MayBach, Jervis, Latrobe, Wynans, Murdock, Oliver Evans, Fitch, Hedley, Vascode, Da Gama, Bill, Von Weber, Bessemer, Lief Ericsson."

Over the North and South main entrances to the Transportation Building the word "Transportation" appears, and over the East main entrance the words "Transportation Exhibit."

Over the North and South main entrances to the Mining Building the word "Mining" appears.

In the hemicycle of the Electricity Building are the following names: Daniell, Ampere, Galvani, Ohm, Sturgeon, and above the name of Franklin (five times).